


Angels Ceurs "Prepess H-pranan"

# LATEST MAGIC 

 BEING
# ORIGINAL CONJURING TRICKS 

## INVENTED AND ARRANGED

BY

## PROFESSOR HOFFMANN

(ANGELO LEWIS, M.A.)
Author of '"Modern Magic," etc.

WITH NUMEROUS 1LLUSTRATIONS

First Edition

NEW YORK<br>SPON \& CHAMBERLAIN, 120 Liberty St. 1918

Copyright, 1918
By SPON \& CHAMBERLAIN

TO
J. N. MASKELYNE, ESQ.
foremost of english magicians, AND -
Fearless Exposer of Falsehood and Fraud
This Book is Dedicated
——BY ——
His Friend and Admirer, THE AUTHOR

## PREFACE

The tricks described in the following pages are of my own invention, and for the most part are entirely new departures: not only the effects produced, but the appliances by means of which they are produced, being original.

From the nature of the case, it follows that few of the items described have been submitted to the supreme test of performance in public, but all have been thoroughly thought out; most of the rootideas having in fact been simmering in my mind for more than two years past. One or two of them may demand a more than average amount of address on the part of the performer; but the majority are comparatively easy, and I believe I may assert with confidence that all will be found both practicable and effective. Should any of my modest inventions be found, as is not improbable, susceptible of further polish, the keen wits and ready fingers of my brother wizards may safely be trusted to supply it.

The items entitled The Mystery of Mahomet, The Bewildering Blocks, and The Wizard's vii

Pocket-book, have been described in the columns of an English magical serial, but have never appeared in book shape, and are by special desire, included in the present volume.

A final word on a personal matter. Had I been prophet, as well as magician, when I first began to write on conjuring, I should have chosen a different pen-name. In the light of later events, my selection was unfortunate. My identity has long been an open secret, but as I cannot flatter myself that it is universally known, I take this opportunity to assure all whom it may concern that I am British to the backbone.

Louis Hoffmann.

## CONTENTS

Portrait of Professor Hoffmann . . . . Frontispiece
Preface
Prance ..... viipage
Some New Appliances of General Utility ..... 1
Magical Mats ..... 1
Fairy Flower-Pots ..... 5
Patter Introducing the Flower-Pots ..... 8
Adhesive Cards and Tricks Therewith ..... 10
The Missing Card ..... 12
Novel Applications of the "Black Art" Principle ..... 17
Black Art Mats and Black Art Patches ..... 17
A Magical Transposition ..... 23
The Detective Die ..... 26
Dissolving Dice ..... 32
Where is It? ..... 38
Card Tricks ..... 46
Arithmetic by Magic ..... 46
Those Naughty Knaves ..... 49
Magnetic Magic ..... 55
The Telepathic Tape ..... 57
A Card Comedy ..... 60
The Fast and Loose Card-Box ..... 63
A Royal Tug of War ..... 64
Sympathetic Cards ..... 66
Tell-Tale Fingers ..... 68
Divination Doubly Difficult ..... 72
A New Long Card and Tricks Therewith ..... 77
The Mascot Coin Box ..... 83
Page
Miscellaneous Tricks ..... 88
Money-Making Made Easy ..... 88
The Missing Link ..... 92
Culture Extraordinary ..... 97
The Bounding Beans ..... 104
Lost and Found ..... 110
The Riddle of the Pyramids ..... 115
The Miracle of Mumbo Jumbo ..... 123
The Story of the Alkahest ..... 130
The Oracle of Memphis ..... 137
The Mystery of Mahomet ..... 146
The Bewildering Blocks ..... 156
An "Od"' Force ..... 162
The Mystery of the Three Seals ..... 170
The Wizard's Pocketbook ..... 180
Concerning Patter ..... 192
The Use of the Wand ..... 203
A Few Wrinkles ..... 215
L'Envoi ..... 222

## LATEST MAGIC

## INTRODUCTORY

SOME NEW APPLIANCES OF GENERAL UTILITY
The little appliances to be presently described are the outcome of ideas which, after a long period of incubation in my note-books, have ultimately taken concrete form in what, I venture to believe, will be found to be practical and useful items of magical apparatus. I may further claim that they combine in an exceptional degree absolute innocence of appearance with a wide range of practical utility. Examples of their uses are indicated in the following pages, but the inventive reader will find that these by no means exhaust their possibilities of usefulness.

## MAGICAL MATS

The first to be described are of two different kinds, to be known as the "Card" and "Coin" Mat respectively. They are in appearance simply circular table-or plate mats, with an ornamental
border as depicted in Fig. 1, and about seven inches in diameter. In the centre of each is an embossed shield, ostensibly a mere ornament, but in reality serving, as will presently be seen, an important practical purpose.


Fig. 1

To the casual observer the two mats look precisely alike, but there are in reality important practical differences between them. The "coin" mat is covered with leather on both sides, and each has the embossed shield, so that, whichever side is uppermost, no difference is perceptible to the eye. In the case of the "card" mat the upper surface only is of leather, the under side being covered with baize. The object of this difference is that the exposure (accidental or otherwise) of the baizecovered side of the card mat may induce in the mind of the spectator the assumption that the under side of the coin mat is covered in the same way, such assumption naturally precluding the idea that it is reversible.

Each mat has a secret space, after the manner of the old "multiplying' salver, between its upper and under surfaces. The opening in each case is opposite the lower end or point of the shield before mentioned, so that, however the mat may be placed, a glance at the shield will always furnish a guide to the position, for the time being, of the opening.


Fig. 2

In the case of the card mat the secret space (see Fig. 2) is just large enough to accommodate three playing cards, one upon another. The corresponding space in the coin mat (Fig. 3) is shorter, narrower and deeper, being designed to receive,
one upon the other, a couple of half-crowns, or coins of similar size. ${ }^{1}$

When required for use, the coin mat is prepared, shortly beforehand, by rubbing the whole of the space within the ornamental border on one of its faces with diachylon, in the solid form. The


Fig. 3
diachylon is used cold, the necessary rriction melting it sufficiently, without any additional heating. This treatment renders the surface of the mat, for the time being, adhesive, without in any way altering its appearance. To make sure of its being just right, press a half-crown or penny down firmly

1 Where coins of English denominations are referred to in the text, the American wizard will naturally replace them by corresponding coins of the U. S. currency.
upon it, turn the mat over, and wave it about freely. If the coin adheres securely, the mat is in working order.

## THE FAIRY FLOWER-POTS

These are, strictly speaking, only flower-pot cases, called in French cache-pots. They may be of leather or cardboard, ornamented on the outside, but plain black inside, their general appear-


Fig. 4
ance being as shown in Fig. 4. They have neither top nor bottom, and when not in use, can be opened out flat or rolled up as in Figs. 5 and 6, for greater portability.

The pair, when needed for use, are exhibited in
the first instance as one only, the one within the other. The professedly single pot, after being proved empty by exhibiting the interior and pass-


Fig. 5


Fig. 6
ing the hand through it, is made into two. by simply drawing out the inner one. The duplication is not presented as a trick, the modus operandi
being self-evident, but it has a pretty effect, and the exhibiting of the two pots as one in the first instance admits of the presence, within the outer one, of a secret pocket, open at top, as depicted in Fig. 7, but folding down, when not in use, flat against its side. ${ }^{1}$


Fig. 7

The main object of this pocket is to enable the performer to "vanish" a card. The card to be got rid of is dropped ostensibly into the flowerpot, or rather, the pot being bottomless, through it on to the table, where, when the pot is lifted, the spectators naturally expect to see it. It has however disappeared, having in fact been dropped into the pocket, where it remains concealed. Two, or even three cards may on occasion be dealt with in the same way. By covering the pocket with the

[^0]fingers in the act of picking up the pot, the interior of the latter may be freely shown after their disappearance.

The pocket, previously loaded accordingly (though the flower-pot is shown, to all appearance, empty), may also be used for the production of a card or cards.

## PATTER APPROPRIATE TO THE FAIRY FLOWER-POTS

The flower-pots may be introduced as follows:
"Permit me to call your attention to one of my latest improvements. Conjurers have a foolish fancy, as I dare say you have noticed, for borrowing other people's hats. If a conjurer wants to collect money from the air, he collects it in a hat. If he wants to make an omelette, he cooks it in a hat. If he wants to hatch a few chickens, he does it in a hat. And, for fear of accidents, he never uses his own hat, but always borrows somebody else's. It's very wrong of us. As Sir William Gilbert says, about some other forms of crime,

> 'It's human nature, P'raps. If so, O! isn't human nature low.'

But we all do it. The worst of it is, we get so in the way of borrowing hats that we do it without thinking. You will hardly believe that one evening I came away from the theatre with two hats.

One of them was my own. The other I had bor-rowed-from under the seat. You don't believe it? Well, I said you wouldn't. I always know!
"But that is not all. It isn't only the bad effect on the conjurer's own morals, and sometimes on the hat. People are so careless. They do leave such funny things in their hats. Cannon balls and birdcages; babies' socks and babies' bottles; rabbits and pigeons, and bowls of fish, and a host of other things. And just when you are going to produce some brilliant effect, you are pulled up short by finding some silly thing of that sort in the hat. It's most annoying.
"So, after thinking it over, I made up my mind to do away with hats altogether. Of course F don't mean for putting on people's heads, but so far as conjuring is concerned, and it struck me that a pretty flower-pot, like this, would form a capital substitute." (Show as one, the combined pots, inside and out.) "Much nicer than a hat, don't you think? It is prettier, to begin with, and then again, you can see right through it, and make sure there is no deception. You see that at present the pot is perfectly empty.
"But no! I scorn to deceive you. I am like George Washington, except that I haven't got a little axe. I cannot tell a lie. At least it hurts me very much to do so, and I don't feel well enough to do it now. No! It is useless any longer to disguise it! The pot is not really empty, for you see
here is another inside it." (Produce second pot.) "You wouldn't have thought it, would you? In fact, you would never have known, if I hadn't told you.
"Of course I could keep on doing this all the evening, but there wouldn't be much fun in it, and no time would be left for anything else, so I will proceed at once to make use of the pots for a little experiment with cards."
(Proceed with any trick for which the card mat may have been prepared.)
N. B. It will be taken for granted, in the description of tricks dependent upon the use of the flower-pots, that these have been already introduced, after the above or some similar manner.

## ADHESIVE CARDS AND TRICKS THEREWITH

I believe I may safely claim that the device I am about to describe was, until I disclosed it some months ago in the Magazine of Magic, an absolute novelty. It consists in the preparation of one card of a pack (or, better still, of a spare card, to be substituted at need for its double), by rubbing one or other of its surfaces, shortly before it is needed for use, with diachylon, in the solid form.

We will suppose, in the first instance, that the back of the card is so dealt with. The rubbing does not alter its appearance, but gives it a thin coating of adhesive matter, and if another card is
pressed against the surface so treated, the two adhere, and for the time become, in effect, one card only, viz., the one whose face is exposed, the other having temporarily disappeared from the pack.

This renders possible many striking effects. To take an elementary example, let us suppose that the old-fashioned flat card-box, or some other appliance for magically producing a card, is loaded with, say, a seven of diamonds. The corresponding card is forced on one of the company, and taken back into the middle of the pack, on the top of the prepared card. The performer does not disturb or tamper with the pack in the smallest degree. He merely squares up the cards, and, pressing them well together, hands them to be shuffled, meanwhile calling attention to the cardbox, which is shown apparently empty. He then asks the name of the drawn card, announcing that it will at his command leave the pack and find its way into the box.

He now counts off the cards, showing the face of each as he does so, and leaving it exposed upon the table. The seven of diamonds has disappeared, being in fact hidden behind the prepared card, which we will suppose to be in this instance the queen of clubs.
Leaving the cards outspread upon the table, the performer opens the card-box, and shows that the missing card has somehow found its way into it.

In the hands of a novice, the trick might end at
this point; but even a novice may very well carry it a stage further. To do so, he will in the first place replace the card in the box, in such a manner that it can be again "vanished." In gathering together the outspread cards, he takes care to place the queen of clubs on top of the rest. As this. however, is the double card, the actual top card is of course the missing seven of diamonds. It is an easy matter, in handling the cards, to detach this from the queen of clubs, and, after a little "talkee-talkee," show that it has left the box and returned to the pack.

The above would, however, be much too crude and elementary a proceeding to commend itself to the expert. In the trick next to be described the same expedient is employed after a more subtle fashion.

## THE MISSING CARD

The requirements for this trick consist of two complete packs of cards and an extra card, which we will suppose to be the knave of diamonds. One of the two packs, which we will call $A$, has on top a card made adhesive at the back as above described, and its own knave of diamonds at the bottom. The other pack, $B$, is wholly unprepared.

The first step is to offer pack $B$ to be shuffled, and when it is returned to palm on to it the spare knave of diamonds, after which the pack is left
temporarily for the time being in view on the table. The next step is to pick up pack $A$, and force from it the knave of diamonds, receiving it back on top of the prepared card, passed to the middle of the pack for its reception. Squaring up the pack and applying the necessary pressure, the performer offers it to be shuffled, meanwhile delivering himself to something like the following effect.
"Before going further, ladies and gentlemen, I want you to remember exactly what has been done. A card has been chosen from this pack. It has been put back again, the cards have been shuffled, and you can all bear witness that I have not touched them since. Nobody knows, except the lady who chose it, what card she chose. Whereabouts in the pack it may be at this moment not one of us knows, even the lady herself. I can assure you truthfully that $I$ don't, but I propose, by force of magic, to compel that card, whatever it may be, to leave that pack altogether, and pass into the other one. Nay, more than that, I shall compel it to place itself at any number in that pack you like to name. What shall we say? Seventh? Good.
"Now please bear in mind that that pack, like the other, has just been shuffled, and that I have not touched it since. It is therefore manifestly impossible that I should know the position of any card in it. Of course, as there is already a knave of diamonds in the pack, it is just possible, though
scarcely likely, that that card may have been shuffled into the seventh place. We will see."

He counts off cards from the top of the pack on to the table, faces doun, not exposing any card till he comes to the seventh, which he holds up so that all may see it. "Now, Madam, is that your card? I don't want to know the name of it yet. It is not your card? I did not suppose it was. for the chances were over fifty to one against it, but you never can tell!"

He gathers up the cards counted off, and without disturbing their order, replaces them on the top of the pack, thereby bringing the original top card to the seventh place.
"Now please observe that I do not touch these cards again till the miracle has actually happened. I will now ask you, madam, to be good enough to name your card. The knave of diamonds, you say? That is all right. Had you taken the knave of clubs, I should have feared for the success of my experiment, for that knare always gives trouble, if he can; but the knave of diamonds is a very gentlemanly card, and I have no doubt that he will readily oblige. Now, Percy (perhaps you didn't know his name was Percy), I want you to leave the pack you are in, and place yourself seventh in the other pack. Go at once, like a good boy. Start at the top, and go straight down. One. two, three, four, five, six, seven!
"I should think he has arrived by this time.

Let us make sure first, though, whether he has really left the other pack."

Picking up pack $A$, he counts the cards slowly, not looking at them himself, but showing the face of each before laying it on the table. "Stop me, please, if you see the knave of diamonds." He counts, "one, two, three, four," and so on to the end. "Fifty-one cards only! Then there is one card missing, and as you have not seen the knave of diamonds, and as all the other cards are here, it is plain that it is he who has left the pack. We have still to find out whether he has obeyed orders, and gone over to the other pack. You wished him to place himself seventh, I think. I won't touch the cards myself. Will some gentleman come forward, and count them off for me?" (This is done.) "The seventh card is really the knave of diamonds, is it not?
"But, you may say, this might be the knave properly belonging to this pack. Please look through the pack, sir, and if there has been no deception you will find the proper knave in some other part of it. You have found the other knave? Then you will admit that that proves clearly that this first one is the identical card the lady drew." ${ }^{1}$

It would be easy to give other combinations dependent on the use of the adhesive principle, but

[^1]these may safely be left to the ingenuity of the reader. If the face, instead of the back, of a given card be treated with the adhesive, that card will itself disappear from the pack. By due adjustment two adhering cards may (the one slightly overlapping the other) be made to form a temporary long or wide card.

# NOVEL APPLICATIONS OF THE "BLACK ART" PRINCIPLE 

## BLACK ART MATS AND BLACK ART PATCHES

The Black Art Table has long since established itself in the affections of the conjurer as one of his most effective aids. At a stage performance the presence of one or more such adjuncts is almost a matter of course, but the drawing room performer finds many occasions when, for one reason or another, the use of such an aid is precluded. Some wizards, as a matter of personal convenience, decline to burden themselves with more artistic luggage than can be bestowed in an ordinary handbag. Others, again, hold (and not without reason) that the use of a special table, imported by the performer himself, tends to discount the marvel of his show; as being suggestive of that "preparation" which every artistic conjurer is anxious to disclaim. It is no doubt an easy matter to arrange a good enough programme for which the aid of "black art" is not needed, but this means the exclusion not merely of a valuable auxiliary, but of many of the most striking magical effects.

I have pleasure in introducing to the reader a substitute which, though its capabilities fall a good
deal short of those of the actual table, will answer many of its purposes, apart from special merits of its own, and which has the further recommendation of exceptional portability. It may be appropriately entitled the Black Art Mat. It consists of a piece of Bristol board of size and shape suitable to the purpose for which it is to be used, covered on both sides with black relvet and edged with narrow ornamental braid or binding. The one


Fig. 8
side has no speciality, but the other has a flat pocket across one or more of its corners; as indicated in Fig. 8. In the case of a mat of small size the pocket may extend diagonally from corner to corner as in Fig. 9. The edge of the pocket may be braided if preferred (the rest of the surface being ornamented to correspond) but if the mat be well made this is not necessary. The mouth of each pocket is made slightly "full," and is held open
a quarter of an inch or so by means of a stiffening along its inner edge. By having the millboard foundation cut in half before it is covered, the mat may be made to fold like a chessboard for greater portability.


Fig. 9

If some small article, say a coin or ring, is laid on mat just behind the mouth of the pocket, it may be made to disappear therein, being in fact swept into the pocket in the act of apparently picking it up. In the case of a coin, the pocket may by a slight alteration of procedure be used to effect a "change"; a substitute, palmed beforehand, being exhibited in place of the one professedly picked up from the mat.

It is desirable when placing the mat upon the table for use to see that the mouth of the pocket is duly open and has not been, by any accident, pressed flat, and so closed.

The utility of the black art mat, however, does not depend upon the pocket only. Its unbroken or "plain" side, or indeed a mat wholly without pockets may also be very effectively used for vanishing purposes. In this case a little auxiliary appliance comes into play. This is a small velvet patch, serving as an "overlay." It may be round or square, according to the purpose for which it is intended to be used. For coin-vanishing purposes it is best circular, and about two inches (or less, as the case may be) in diameter. The foundation is in this case a disc of thin card covered on both sides with velvet, in colour and texture exactly corresponding with that of the mat, under which conditions the patch, when laid on the mat, will be invisible. The exact similarity of the two surfaces is a point of the highest importance for black art effects, and the relvet used, if not actually silk relvet, should at least be of the silk-faced kind. Velvet which is all cotton will never give satisfactory results.

If a coin be laid on any part of the mat the performer has only (in the supposed act of picking it up) to lay the relvet patch orer it to render it inrisible. If it is desired to reproduce the coin. a handkerchief shown to be empty, may be laid over the patch, and a moment or two later picked up again, bringing away the overlar within it, and again revealing the coin in statu quo. A practical example of the use of this device will be found in
the case of the trick entitled Lost and Found, post.
Another little device which will be found useful in connection with the black art mat is a cardboard dise covered as above, to one side of which a coin, say a half-crown or half-dollar, is cemented as in


Fig. 10

Fig. 10. Such a patch, laid on the mat, coin side down, will attract no notice, but the mere act of turning it over will at any given moment produce the coin. The "change" of a coin may be expected very neatly by the aid of this device. Suppose, for example, that the performer desires to retain, unknown to the spectators, possession of a marked coin just handed to him. He lays it, to all appearance, in full view upon the table, but as a matter of fact merely turns over a patch, loaded as above, already on the table, the borrowed coin remaining in his hand.

The velvet patch may also be utilised in another
way for "changing" a borrowed coin. The performer, asking the loan of a marked coin, brings forward held in his left hand a velvet mat (of small size) whereon to receive it; the right hand meanwhile holding palmed against the second and third fingers the velvet patch, and between this and the hand a substitute coin of similar kind. Turning (to the left) towards his table, with the coin in full riew on the mat, he (apparently) picks it up and holds it aloft with the right hand, placing the now empty mat alone on the table. What he really does is to lay the relvet patch over the borrowed coin and to pick the substitute in its place. The original lies perdu on the mat, whence it is child's play to gain possession of it at any later stage of the trick.

The process may be varied by placing the mat, after receiving the borrowed coin upon it, at once on the table, and a little later picking up the mat with the left hand, then proceeding as above indicated. The adrantage of this plan is that the turn to the table to pick up the mat masks for the moment the right side of the performer and gives him a convenient opportunity to palm the coin and patch, bestowed in readiness in the pochette on that side.

The same principle may be applied with appropriate modifications to card tricks. The idea of the black art mat is so completely a novelty that I have not found leisure to give it the full considera-
tion it deserves, and have probably far from exhausted its possibilities, but I offer by way of illustration the trick next following, which it seems to me would be rather effective, particularly as an introduction to some other card trick. We will call it

## A MAGICAL TRANSPOSITION

Prepare two cards, say an eight of hearts and a seven of spades, by blackening all their edges save one of the narrow ends, ${ }^{1}$ and backing each with velvet matching the mat. Lay the two cards so treated face down with the white edge towards yourself on the mat at some little distance apart, or preferably on separate mats. Force corresponding cards on two members of the company and deliver an oration to something like the following effect:
"We hear people talk sometimes about the quickness of the hand deceiving the eye. I suppose such a thing must be possible, or nobody would have thought of it, but it seems to me that if it did anything of the kind, either the hand must be extra quick, or the eye extra slow. I know I should be afraid to attempt anything of that sort myself, but if you are a magician of the right sort you have no need to do so, for you can deceive the eye with-

[^2]out any quickness at all. I will prove it to you by means of these two cards which have been chosen. Please give me one of them. I don't mind which."

We will suppose that the card handed up is the eight of hearts.
"Notice please what card this is; the eight of hearts. You can't possibly mistake it for any other card, can you? I will turn it down here on the table. And now for the other card." (It is held up that all may see it.) "This one, you see, is the seven of spades. No mistake about that, either! I will lay that one here." The card is in each case laid upon the velvet-covered card of the opposite kind.
"Please don't forget which is which. There has been no quickness of the hand so far, has there? Now I am going to make these two cards change places." (You touch each with the wand.) "Presto, change!" (Picking up the upper and lower cards exactly one upon the other you show what was a moment previously the eight of hearts. but which now appears to be the seven of spades.) "One card has changed, you see. And now for the other." (You show the other pair after the same fashion.) "And here we have the eight of hearts. I will now order them to change back again." You lay both pairs again face down.
"Now I again give the cards a touch with my wand, and say 'Right about! Change!' and now. you see" (showing the faces of the original cards).
"they have returned to their original positions. "Now you will realise, if you think about the matter, that those two cards couldn't in any natural way change places without your seeing them do it, neither could the one change into the other. But this is where magic comes in. What I really did was to hypnotise you a little so as to make you fancy, when I told the cards to change, that the eight of hearts was the seven of spades, and that the seven of spades was the eight of hearts. It's quite simple, when you know it, and you can see for yourselves that the quickness of the hand has had nothing to do with the matter. For my own part I like to do things slowly; the more slowly the better, and then you can all see how it's done."

The trick is simple enough; but it will test the performer's expertness as to neatness of execution. He must be careful in the first place to put each of the drawn cards as exactly as possible on the opposite velvet-backed card; and in picking up two cards together he should frame them, so to speak, between the middle finger and thumb at top and bottom, and the first and third fingers at the sides. Held in this manner they rest squarely one upon the other and there is little fear of their "duplicity" (or "duplexity") being perceived. In the act of again turning the double card down the upper one should be partially drawn off the one below it; this facilitating the picking of it up alone a few moments later.

An illustration of the use of the same device in a somewhat different form will be found in the item next described, and in the trick entitled "Where is it?" post. Other ways of using it will suggest themselves to any reader of an inventive turn.

## THE DETECTIVE DIE

This is another of the new departures dependent upon the use of the velvet mat. Broadly stated, the effect of the trick is as follows.

One of a group of six different cards laid out in a row or rows repeatedly changes place with some other, the position which it occupies, or to which it has moved, being indicated by the cast of an ordinary die. This may be repeated any number of times. ${ }^{1}$

The requirements for the trick are as follows:

1. The Velvet Mat. This should be one with a plain surface, dimensions preferably eighteen inches by ten, so as to admit of the six cards being laid in one row. A smaller size, say twelve by nine, may suffice, the six cards in this case being arranged in two rows. In either case there must be a space of an inch or so between each pair.

[^3]2. Six cards of like denomination (say for the purpose of illustration six queens of diamonds), each backed with black velvet and blackened at the edges all around save at one end. Here the card is thickened by the interposition of a slip of white card-board between itself and the velvet, so that the card as viewed from that end shall show a clearly visible white edge. Each card has all four of its corners snipped off to a microscopic extent, say a sixteenth, or less, of an inch.
3. An ordinary pack of cards one of which (in the case supposed, the queen of diamonds) bears a mark upon its back recognisable by the performer, but not conspicuous enough to be noticed by any one else.
4. An ordinary die and dicebox, or a champagne tumbler to be used in place of the latter.
5. A tray or plate, about six inches in diameter, whereon to throw the die.
6. The wand.

Preparation. Velvet mat on table, and laid upon it, face down in a row (or a double row, in the case of a small mat), the six velvet-backed cards. These, so laid, will be undistinguishable by spectators at a very short distance from the mat itself. Each is laid with its "white" end toward the hinder part of the table, so that this shall be visible to the performer when standing behind it. The marked queen of diamonds is laid on the top of the pack. The die and dice-box, on their tray,
are laid on the mat, which may partially cover two or more of the six cards.

Presentation. Performer, picking up the pack of cards with his right hand, transfers it to his left, leaving the queen of diamonds palmed in the right. Picking up the tray and its contents with the right hand and advancing with it, he offers the pack to some member of the company, saying: "Will you kindly look well over this pack of cards and satisfy yourself that there is nothing exceptional about them; and when you have done so give them a thorough shuffle. And you, Sir" (handing tray and die to another spectator), "please test this die in any way your please. Throw it as many times as you like. I want you to be quite sure that it throws a different number each time, and that it is not loaded, or 'faked' in any way.
"I don't like bothering people to examine things, for in most cases it is a mere waste of time. But in this case I have a special reason for asking. There is something about this pack of cards and this die which I myself don't understand; and I shall be much obliged to anyone who will help me to do so. As a matter of fact, these cards, though quite ordinary in other respects, are afflicted with a peculiar restlessness. They change places without notice and without any apparent reason. If I were to try to play bridge with them, for instance, I should find as likely as not that my best trump had invisibly left my hand and passed over to the enemy,
which would naturally upset my game and get me into trouble with my partner. The die is equally peculiar, but in another way. From some curious effect of sympathy it knows where a given card is to be found when I don't know myself.
"The only possible explanation I can think of for their peculiarities is the fact that both cards and die were formerly the property of an old magician, and that after his death they were shut up together for some years in the same box with this wand, which also belonged to him, and that they have imbibed some of its magical qualities. I will give you a sample of their 'eccentricities.'"

Performer takes back the cards and proceeds to force the queen of diamonds on some member of the company (a lady for choice). Leaving the drawn card for the time being in her hands, he asks a gentleman to shuffle and cut the rest of the pack and count off from the cut five indifferent cards. The card drawn by the lady is then shuffled with these, so that its position among the six shall be unknown. Performer, taking these from the holder, deals them in a row (or double row, as the case may be) upon the velvet mat, placing each exactly over one of the velvet-backed cards; the white hinder edges of these guiding him as to their positions.
"We will now consider these cards as numbered in regular order, One, Two, Three, Four, Five, Six! Among them somewhere or other, is the
card the lady chose. At what number it stands nobody knows (I can assure you that I don't), but the die will tell us instantly. May I ask you, Madam, to name your card. The queen of diamonds; you say? Good! Now will the gentleman who holds the die kindly throw it. What is the number thrown? A three?" (Whatever the number happens to be.) "The die says the card stands number three. Let us see whether that is correct."

He picks up the two cards occupying the position indicated, and shows the face of the undermost, which is of course seen to be the queen of diamonds.
"But now we come to the more remarkable feature of the case. I told you about the queer way in which the cards change places. Even in this short time I daresay the lady's card has got tired of being number three, and has moved away to some other number. If so, the die will tell us. Throw it again, Sir, please."

This is done, the die bringing up a new number, say "five."
"The die declares that the card has moved, and now stands fifth. We shall soon see whether such is really the case. First, however, let us see whether it has really departed from number three."
Performer has meanwhile replaced the two cards just lifted. He now lifts the upper one only,
which (being one of the indifferent cards) shows a different face. "The queen has gone, you see. And now to ascertain whether she has really passed to number five."

The two cards standing at that number are lifted together, and again a queen of diamonds is exhibited. The trick can of course be repeated any number of times, but it is better not to prolong it beyond a third or fourth "move."

In picking up two cards together, in order to show the undermost, they are lifted with second finger at top, thumb at bottom and the first and third fingers at the sides. Thus "framed" so to speak, the two cards will lie squarely the one upon the other and be undistinguishable from a single card. When it is desired to lift the upper card alone, it should be nipped between the second finger at top right-hand corner and thumb at bottom left-hand corner, when it will be brought away clear without difficulty.

There is one contingency for which the performer must be prepared, namely, that the throw of the die may happen to correspond with the actual position of the card drawn. Both cards of the pair are in this case alike, and the performer cannot, at the succeeding throw, show that the drawn card is no longer in its late position. This possibility is provided for by having the back of the card marked as before explained. Should the contingency in question arise, the performer, hav-
ing meanwhile noted the marked card, does not call attention to the disappearance of the queen from that number, but proceeds at once to show that it has moved to its new position. There is not the smallest fear that anyone will notice the omission.

## THE DISSOLVING DICE

## To be worked on a Black Art Table

The requisites for this trick are as under:

1. Three small billiard balls, one red, two white.
2. A white half-shell to correspond, vested or placed in a pochette.
3. Three hollow wooden dice, each of such a size as just to contain one of the balls, and lined inside with velvet to prevent "talking." One side of each is left open, but the opening can be closed at pleasure by the insertion of a loose side with a beveled edge. When this is in position, the die appears solid. The inner surface of each of the loose sides is also covered with black velvet, so that when lying with that side upwards on a black art table it is practically invisible.
4. Three cardboard covers, fitting easily over the dice. In preparation for the trick the three balls are placed inside the dice, and these are placed on the table, open side upward, but with the loose sides inserted on top, and the covers over them.

Presentation. The opening "yarn" may run as follows:
"I once read a story about a man who invented a most ingenious piece of furniture of the 'combination' kind. It started, say, as a table, but by giving it a pull here and a push there, it became a step-ladder. Another pull and push, and it turned into a mangle, or by just turning a button or two, you could make it a clothes-horse.
"The story says that at first it was a great success, but after a little while the thing began to work too easily, and sometimes changed of its own accord when least expected, which was a drawback. It was annoying, naturally, when you were using it as a step-ladder, and hanging up a picture, to have it suddenly turn into a clothes-horse, and land you on the floor. It was vexing, too, when it was a table, and the family were seated round it at breakast, to have it turn into a mangle, and mangle the cups and saucers.
"I shouldn't care myself to have a piece of furniture like that: it would make life too exciting. But the story gave me an idea. It struck me what a convenience it would be, after showing one of my little experiments, to be able to turn the articles I had been using into what I wanted for the next. I haven't got very far as yet, but I have made a beginning in a small way, and I will show you how it's done.
"I have here three wooden dice, with a cover for
each of them." (Take off all three covers, placing each beside its own die. Then, placing one of them on the end of your wand, adrance with it to the company, tacitly inriting anyone who pleases to take it off and examine it.) "I use these covers to spare the feelings of the dice at the critical moment. Like mrself, they are rather bashful. They don't mind doing the Jekyll and Hyde business, but ther don't like to be seen doing it. By the way, there is a very ancient trick (believed to have been invented by Noah in the Ark, to amuse the boys on a wet Sundar), which is worked br means of a sham die fitting orer the real one. Please take my word for it that I do not use any such stale derice. If I did, you may be quite sure I should not mention it. These are all three genuine dice. They are rather too large to play backgammon with, but sare as to size, they are merely big brothers of the regular article. Most of you know, no doubt, that in properly made dice. the points on opposite sides always together make seren. Notice please, that each of these dice has the numbers placed correctly." (Taking up one of the dice and turning it about.) "You see, five on this side, two on that; together, seren. Three on this side, four on that; together, seren. Six on this side, one on that ; again seven."

This is repeated, in a casual way, with the other two dice, the object being two-fold, riz. : first, by showing all six sides, to induce the belief that the
dice are solid, and secondly, to enable the performer, in replacing them on the table, to turn each the other way up, so as to bring the loose side undermost. This is best done by placing the thumb on top of the die, with the first and second fingers behind it, then tilting the die over a little to the front, and slipping the two fingers underneath it. After showing it on all sides, as above mentioned, it is an easy matter to replace it with the loose side undermost, as desired.
"Now, as it happens, I have no immediate use for dice, but I want to show you a pretty little effect with billiard-balls. Naturally, the thing to be done is to change the dice into billiard-balls. It's quite easy, if you are provided with my patent quick-change combination dice. All you need to think about is to take care to have even numbers in front." (You turn the dice accordingly, and in so doing lift each die a little, and shift it forward a couple of inches or so, leaving the loose side undisturbed just behind it, the ball travelling forward with the die, though still covered by it.) "You don't see why they should show even numbers? Because they would look 'odd' if they didn't. Quite simple,-when you know it. Now I cover all three dice over, to spare their blushes, as I explained just now. I wave my wand over them and say, 'Presto! Proximo! Change!' And we shall find the dice have all turned to bil-liard-balls."

The right hand lifts the first cover. pressing its sides sufficiently to lift the die within it, exposing the ball, and in bringing it down again lands it close to one of the wells of the table. The exposed ball is picked up with the left hand, and while the attention of the company is attracted in that direction, the die is allowed to slide out of its case into the well, after which the ball and corer are brought forward and handed to someone of the company.

The other two balls are now uncovered in the same way, but in this case the dice mar be left in their covers, the offer of the first cover, found empty as above, having sufficiently proved that they really disappear.
"Well, we have got our three billiard-balls. Good, so far. Next, can any gentleman oblige me with the loan of a billiard table? Nobody offers: that's unfortunate. Well, does any gentleman happen to have a cue about him. No again? Well, perhaps it would be 'cuerious' if any gentleman had. I beg your pardon, it slipped out unawares. It shall not occur again.
"It's unfortunate that I can't borrow a billiard table and a cue, because it prevents my showing you my celebrated break of ninety-three off the red with my eres shut. When I showed it to Gray. he turned green, but that is another story. You don't beliere it? Well, I told you it was a story.
"Anyhow, as we have got the balls, we must do something with them."

The sequel may vary, according to the fancy of the performer, and his skill in ball-conjuring. For lack of a more effective dénouement, the trick may be brought to a finish as follows:

Secretly getting the shell ball into his right hand, and picking up the red ball with the left, the performer proceeds:
"Well, here we have three balls, one red and two white. To prevent ill feeling between them, I think we had better make them all the same colour : and as the white are in the majority, we will have them all white. It is quite easy, if you know how to do it. You have only to breathe on the ball, give it a roll round in the hand to take the colour off, and there you are."

After breathing on the ball, you bring the right hand containing the shell over it, and exhibit it, shell in front. You then transfer it in the same condition, to the opposite hand. Then pick up one of the two white balls with the right hand, transfer it to the left and show the two side by side. Then pick up and add the third ball, in so doing letting the red ball fall into the right hand, and while calling attention to the three in the opposite hand, drop it into the profonde. You then bring up the shell over one or other of the two solid white balls, thereby transforming the three into two. Drop the solid from the shell into the right hand, making the two into one; finally causing the disappearance of this last after the usual manner.

If the reader (being an expert) is provided with a spare red ball and red shell, he may offer the choice as to which shall be the colour of all three, finally causing their disappearance after the manner above described, or his own version thereof.

## WHERE IS IT?

This is another of the tricks dependent on the novel application of the black art principle.

For programme purposes the trick may, if preferred, be entitled "The Erratic Shilling." Its effect may be broadly described as follows:

A marked shilling, lent by some member of the company, after being professedly magnetised or mesmerised by rubbing, is laid upon a black velvet mat and covered with a playing card, face down. Two other cards are laid (also faces down), one on each side of the first, at a few inches distance from it, and the audience are given to understand that the rubbing has imparted to the coin the power to travel from card to card at command, and indeed sometimes of its own accord. When the card which covered the coin is lifted, this is found to be the case. The shilling is no longer where first seen, but is found to have placed itself under one of the other two cards. The spectators may be invited to say under which of the cards they would like the coin to pass, when it will place itself accordingly.

The coin may be identified by the owner in the course of the trick, as well as at its close.
The requirements for the trick are as follows:

1. The velvet mat.
2. A pack of cards, arranged as presently to be explained.
3. Three overlays (see p. 20), each consisting, in the present instance, of a court card, backed with velvet of similar tint and texture to that with which the mat is covered. Three of the edges of each card are blackened, but the fourth (one of its si orter sides) is left white, and thickened by the insertion of an extra slip of white card along that end. The effect of this is that, as the card lies on the mat, its white edge is visible from that side, but from no other position.
4. Three cards, corresponding with the three overlays, which we will suppose to represent the queen of clubs, and the knaves of spades and diamonds respectively. The queen is wholly unprepared, but each of the two knaves has a point of fine wire, or a black bristle projecting a sixteenth of an inch or so, midway from each of its sides. The "queen" overlay is furnished with similar points, the object of these being to enable the performer the more easily to lift a given card with or without its duplicate overlay.

In preparing for the trick the two "knave" overlays, each covering a shilling, are laid beforehand on the mat, velvet side up, eight or ten inches
apart, as shown in Fig. 11, under which circumstances they are invisible to the spectators at a few feet distance, and very nearly so to the performer, save that their white edges, turned towards himself, furnish him with an exact guide to their position. On the top of the pack are laid, first the two knaves. On these the queen overlay, and uppermost the unprepared queen.


Fig. 11

In presenting the trick the borrowed shilling is laid on the mat midway between the two overlays already on the table, and is covered with the top card of the pack, the third overlay being lifted off with it, and resting beneath it with its centre as nearly as possible over the coin.

The two following cards are now laid one on each side of the first, as in Fig. 12, each on the corresponding overlay, the white edges of these, risible
to the performer, but not to the company, serving as guides to exact position. When the performer desires to show that the coin is not under a given card, he raises the card only, lifting it lengthwise, and leaving the coin covered by the overlay. When he desires to exhibit a coin, he picks up the card covering it breadthwise between finger and thumb and with it the overlay beneath it.


Fig. 12

The introductory patter may run as follows:
"You have all heard, no doubt, of what is called the thimblerig trick, frequently exhibited at fairs and on race-courses. Some of you gentlemen may even have parted with a little money over it. For the benefit of the ladies I will explain what it is.
"The operator has before him on a small board or tray three thimbles, or half walnut-shells. He exhibits a small pea, or a pellet the size of a pea, which he affectionately calls the 'joker.' This he
places under one of the thimbles, all three of which he then shifts about on the tray; inviting the spectators to bet with him as to which thimble the pea is under. He has two or three confederates, who bet, and naturally win, but if an outsider is rash enough to back his own supposed smartness he loses; for as a matter of fact the pea is not placed under either of the thimbles at all until after the bet is made, when it is skilfully introduced under whicherer thimble best suits the performer.
"The trick is in truth a mere affair of dexterity; the performer having acquired by long practise the power of placing the pea under any thimble he pleases. What I propose to show you is a similar effect, but more surprising, because, as you will see, there is no room for dexterity, or indeed any form of trickery; so that I have to depend entirely upon my magic power. I shall use a shilling, as being more easily seen than a pea, and three cards from this pack to represent the thimbles.
"Will some gentleman oblige me with the loan of a shilling; marked in such a way that he may be sure of knowing it again."

Receiving the coin in his right hand, the performer makes believe to transfer it to his left; wherein he already has a shilling of his own. Surreptitiously depositing the coin lent to him behind the pack of cards on the table, he exhibits the substitute on the palm of the left hand and rubs it with the fingers of the right.
"I do this," he explains, "in order to drive out all adverse magnetisms, and to substitute my own. I will now put the coin in full view on the table and cover it with a card. See that I do so fairly."

After laying down the coin he takes the top card of the pack, and with it, unknown to the spectators, the overlay beneath it, and lowers them on to the coin.
"Notice particularly, please, where I have placed the coin, and notice too that I do not touch it again. I will now place two more cards, one on each side of the first one." He does so, letting the spectators see clearly that there is nothing in the hand save the card itself, and then slowly lowering it exactly on to one of the two overlays on the table. "Now I make a few magnetic passes over the cards, so." He waves his wand backwards and forwards above the cards, at a few inches' distance.
"And now, where is the coin? Still under the middle card, you would say? You are mistaken." He lifts that card lengthwise, leaving the overlay covering the coin; then replacing the card. "It is no longer there, you see. In point of fact it has passed under this card."

He lifts one of the side cards breadthwise, the overlay coming with it, and exposes the coin beneath it. "Here it is, you see. We will try once more." He replaces the card and then shows, in like manner, that the coin has passed to the card on the opposite side. After one or two trans-
positions have been shown, the audience being allowed to say under which card the coin shall appear, and the last shift having been to one of the side positions, the performer says: "I should like you to be satisfied that it is really the marked coin and no other, that wanders about in this way. I will ask the gentleman who lent it to me to verify his mark."

He picks up from one of the side positions the coin last uncovered and brings it forward, but in transit "switches" it for the borrowed coin, which he has a moment previously picked up from its resting place behind the pack. It is, of course, this last which he offers for identification, again exchanging it for the substitute before replacing this in its former position. The final reproduction must be from under the centre card, the performer again ringing the changes before returning the coin to the owner. At the close of the trick all three cards are placed on the pack, the centre overlay going with them. The other two overlays are left on the mat, each still covering its own coin, and the whole being carried off together. If the mat is of the folding kind it can be closed before remoral, effectually concealing the accessories used in the trick.

Some amount of skill will be found necessary to pick up the card with or without the corresponding overlay, as may be desired. The difficulty however speedily disappears with practice. On
the other hand, the trick is well worth the trouble needed to master it, for if the spectators are convinced (as, given perfect execution, they should be) that it is really the borrowed coin which travels about as it appears to do, nothing short of genuine magic will furnish an adequate explanation.

The performer is of course by no means bound to adopt the mise en scene above suggested. If preferred, the patter might be based on a supposed plot between the two knaves to rob the queen, the coin representing the stolen property, secretly passed from the one to the other when either was accused of the theft. The story might conclude with an appeal by the queen to a benevolent magician, through whose good offices her property is brought back to its original position, and in due course restored to her. The touch of the mystic wand would naturally play an important part in effecting the restoration.

## CARD TRICKS

## ARITHMETIC BY MAGIC

Preparation. The two "flower-pots" (see page 5), separated, are placed upon the table. Also the card mat (see page 1), loaded with the ten of any given suit, say diamonds, taken from the pack performer is about to use, and a double-faced card, representing on the one side the seven, and on the other the three of the same suit. The deuce and five of same suit to be laid on the top of the pack.

Performer, advancing pack in hand, palms off the two top cards, and offers the rest to be shuffled. This done, he forces these two cards on different persons. On receiving back one of them, he brings it to the top; executes a false shuffle leaving it in the same position; brings it again to the middle by the pass, and has the second card replaced upon it; then, once again making the pass, brings both together to the top.
(The use of the Charlier pass is here recommended.)

The patter may be to something like the following effect: "Two cards have been chosen, ladies and gentlemen. I can't say what they are, but I can very easily find out. I shall simply order
them to rise up and paw the air. It all depends on the strength of the will. I myself happen to have a very strong will, in fact, I don't know anyone who has a stronger will, except my wife. I cxert my will, and say, 'first card, rise!' and up it comes, as you see."

Stepping well back from the spectators, so that they cannot distinguish from what part of the park the card comes, he works up the hindmost card by the familiar "hand" method. ("Modern Magic," p. 129.)
"Here we have one of the two cards. Let us see what it is. The five of diamonds! Good! And now for the other. Second card; rise! Up comes another card, you see, the deuce of diamonds. Those are the cards which were drawn, are they not?
"Now the question arises, 'what shall we do with them?' It is a pity the ladies didn't choose bigger cards. You can't 'go nap' ${ }^{1}$ on a deuce and a five, can you? I think I can't do better than use them to show you a little experiment in conjurer's arithmetic. Will some young mathematician among the audience kindly tell us what two and five, added together, make?" (He waits for reply, but if none, pretends to hear one.) "Seven! Right first time. And if you take two from five how many remain? Three? Good again. Really

[^4]there are lot of clever people about, if you know where to look for them.
"Now I want to show you that the cards know all about it themselves; in fact, they are just as clever at doing sums as we are. I will take these two cards and drop them into one of these pretty flower-pots. Let me show you first that it is quite empty."
He lays the cards on the little mat while showing inside of flower-pot (the one with secret pocket), then picks up mat, and transfers it from hand to hand, showing, without remark, that the hands are otherwise empty, and lets the two cards slide off it into the flower-pot, the concealed cards naturally going with them.
"Now, ladies and gentlemen, what shall the cards do for you, the addition, or the subtraction sum? It is all the same to me. The addition? Very good. They can't talk, so they will call another card from the pack to give you the answer. Yes, here we have it. Five-and two-are-seven."

As he names each card, he produces it from the flower-pot, the third being the double-faced card, shown as the seven.
"Now I can hear what some of you are thinking. Oh, yes! I often hear what people think. You are thinking that if you had said subtraction instead of addition, I should have been in what is popularly called a hole. But you are mistaken. Now we will ask the cards to do the subtraction
sum. The seven will go back to the pack, and send another card in its place." He drops all three cards back into the flower-pot, and brings them up as before, save that this time the trick card is made to face the other way. "Five-less two-are three! Quod erat demonstrandum, as our old friend Euclid used to say when he had just floored a new poser. As the cards seem to be in a good humour, we will try them once more, and see if we can get them to do a little multiplication." (He drops the three cards into the flower-pot, as before, but this time lets the fake card fall into the pocket.) "Five times-two-are 'ten.'" (Showing the two cards and the ten, in that order.)
"Now I will ask some gentleman to see that these three cards really belong to the pack. The three and seven went back to it as soon as they were done with. The flower-pot, as you see, is again empty." (He shows by lifting it that apparently it is so.)

If the first choice of the audience is for subtraction the order of production will naturally be varied accordingly.

## THOSE NAUGHTY KNAVES

This item may be described, if preferred, as "Knavish Tricks."
Requirements. Card mat loaded with knaves of spades, hearts and diamonds, taken from the pack in use. Knave of clubs on top of pack.

Presentation. Advance, palming off the knave of clubs, and offer pack to be shuffled. When it is returned, force the knave on one of the company. Borrow a hat, and after showing that it is empty, place it, crown downwards, on the table. Receive back the drawn card upon the mat, remarking that you will place it in the hat, which you do accordingly, the other three knaves going in with it. Then, assuming a worried expression, deliver patter to something like the following effect.
"I am afraid, ladies and gentlemen, that I shall not be able to show you the experiment I had intended. I have a telepathic nerve in my left thumb, a sort of private fire alarm, only more so, which always gives me warning when things are going wrong, and I feel it now. If you have read 'Macbeth,' you will remember that one of the witches says:
> 'By the pricking of my thumbs, Something wicked this way comes.'

"I have often wondered whether that old lady could have been a sort of great-great-great grandmother of mine. Magic certainly runs in the family, and we may have inherited it from her. Anyhow, I have just the same sort of sensation myself. Unfortunately, in my case the warning is incomplete. I dare say you will remember that story (I rather think it's in Macaulay's 'Lays of Ancient Rome'), about Little Queen Cole. Her

Majesty had the misfortune to develop a mole upon her nose, and King Cole was worried about it. He consulted Old Moore and Zadkiel, and all the leading astrologers of the day, but all they could tell him was

> 'A mole upon the face Shows that something will take place, But not what that something will be.'

That's just my case. My prophetic thumb merely tells me that something is wrong, but doesn't say what. It may be drains, or the house on fire, or something in the county court. You never can tell!
"Of course it's nothing of that sort now. In the present case it has no doubt something to do with the experiment I want to show you. You chose your card quite freely, did you not, Madam? It never matters to me in the least what card is chosen, with the exception of one particular card, which is a holy terror. May I ask if you happened to draw the knave of clubs? Yes? I feared as much. The knave of clubs is the bane of my life. He is always endeavouring to get himself chosen, and then he does his best to upset my arrangements. And the worst of it is, he leads away the other three knaves. The four of them form a secret society, which they call 'The cheerful blackguards.' The knave of clubs is the president, and the rest have to do just as he tells them. He com-
municates with them by means of a sort of wireless telegraphy, and when he calls they go to him at once." (You here make the "click.") "Did you hear that sound? That's his call now, despatched by wireless from the hat to the very middle of the pack. I have no doubt that we shall find that the other three knaves have already left it, and joined him in the hat." (Make believe to look over the pack, and hand it to a spectator.) "Yes! just as I thought: they are all gone." (To a spectator.) "See for yourself, sir. Not a single knave left. And here they all are, in the hat." (Whence they are produced accordingly.)
As the "click" in some cases adds much to the effect of a trick, and as it may to some readers be an unfamiliar sleight, I may pause to explain that it is executed as follows: Take the pack in either hand, held upright between forefinger and thumb, a little more than half-way down, with the middle finger curled up behind it as in Fig. 13. With the tip of the third finger bend back the extreme bottom corners of the last half dozen or so of the cards, allowing them to escape again smartly. The sound made by the corners in springing back again constitutes the "click." It needs a little practice, but if the cards are held properly, and the sleight worked smartly, the sound will be audible at a considerable distance, whilst the movement of the finger producing it is quite invisible to the spectators.

But we have not yet done with our trick. You may resume as follows:
"I will give you a further illustration of what I have to put up with from the knaves. I should like you to be satisfied that I have nothing to do


Fig. 13
with their bad behaviour." (You palm off the three top cards, and with the same hand offer the four knaves to a spectator. "Will you, sir, make sure that these really are the four knaves, and then place them here on the top of the pack,"-offered
with the left hand. When the knaves have been laid upon it, you transfer it to the opposite hand, and palm on to them the three concealed cards, but immediately slide them off again, with the uppermost of the four knaves beneath them. You hold them up in a careless way, so that the audience, catching sight of this card, may be confirmed in the belief that the cards exhibited in the right hand are really the four knaves.
"Here we have the four knaves, at present all together. I will now distribute them in different parts of the pack, as far apart as possible. One here, nearly at the bottom, one a little higher up, another about the middle, and this last" (you show it carelessly), "close to the top." (This, being a genuine knare, must be placed among the other knaves.) "They could hardly be placed farther apart than that: but to make things a little more difficult for them, I will ask some lady to cut the cards."
This done, and the cards handed back to you, you repeat the click. "There it is again: the wireless signal. You can all bear witness that I have nothing to do with the matter. Now, Sir, will you kindly examine the pack, and unless I am much mistaken, you will find that the other three knares have answered Black Jack's call, and that the four cheerful blackguards have got together again, in which case, with your permission, I will leave them severely alone, and try some other experiment."

The expert will recognise this last effect as a "chestnut" among card tricks, but it is none the worse on that account, and it forms a particularly appropriate sequel to the principal trick.

If the performer possesses the "flower-pot," one of these will naturally be used in place of the hat.

## MAGNETIC MAGIC

Requircments. Card mat, loaded with a single known card (precise nature optional). Pack of cards with corresponding card at top. A horseshoe magnet, the larger the better for the sake of effect. The two flower-pots, placed at some distance apart, preferably on separate tables.

We will suppose that the card selected for the purpose of the trick is the ten of spades. Performer advances, and delivers patter to something like the following effect.
"By way of a change, I should like now to show you a little experiment in magnetism, but magnetism of a new kind. The old sort was a comparatively poor affair. It was only useful with iron or steel. Anything else it wouldn't attract for nuts. My sort of magnetism is a very superior article. It will attract all sorts of things, so long as they are not too heavy, like a sack of coals, or a lawyer's bill. So far, I have been chiefly experimenting with cards, and I will show you how it works.
"I want three ladies each to choose a card from this pack." (He forces the ten of spades, allowing the other two cards to be chosen freely, and takes all three back, face down, on the mat, keeping in mind which of them is the forced card. "I will take one of these cards." (He picks up the forced card, and holds it aloft.) "Please all notice what it is: I don't want to see it myself. I drop it into this pretty flower-pot" (actually dropping it into the secret pocket). "And now as to these other two." (He picks them up and shows them, then replacing them on the mat.) "These I will place in the other flower-pot. First, however, I will show you that at present it is empty.', He does so, and then lets the two cards slide off the mat into the pot, the concealed card going with them.
"Now I take this magnet. It is a very powerful magnet, and I make it still more vigorous by rubbing it on my left coat sleeve. Do you know why on the left? You all give it up? Because in this case the left happens to be right. Simple, when you know it, isn't it? Again, you will observe that one-half of this magnet is painted red. Can you guess why that is? It's so that when it is wanted it is sure to be 'reddy.' I hear a lady smile! Thank you so much! This is the eleven hundred and third time I have let off that little impromptu joke, and no one has ever laughed at it till now.
"Well, as I was saying, or as I was going to say when the lady interrupted me-I mean complimented me, by smiling-Upon my word, I've forgotten for the moment what I was going to say, but I daresay it was of no consequence, so we'll skip it, and proceed at once to 'business as usual.'
"Observe, I just draw the magnet slowly across from the one flower-pot to the other, when the single card, being naturally the weaker, will be drawn out of its own flower-pot, and join the other two." (Looks into flower-pot holding the pair.)
"Yes, it has found its way, as you see." (Lifts the pot, and shows that the third card is on the table with the other two.) "And as it's a well-known fact that nobody but a bird can be in two places at the same time, it naturally follows that it is no longer in this other pot, which is once more empty." (Lifts it up and shows that it is so.)

Variation. If the flower-pots are not available, the single card may be placed in a card box, or other suitable appliance adapted for causing its disappearance, the other two, with the concealed card, being dropped from the mat into a borrowed hat.

## THE TELEPATHIC TAPE

Requirements. Two or three yards of half-inch tape or ribbon, wound on a reel, to which its inner end is secured, and having a loop on its outer end. Coin mat made adhesive, and two packs of cards,
which we will call $A$ and $B$ respectively. From pack $A$ take a court card (say the queen of diamonds), and press it face down against the waxed side of the mat: then turn this over, and place the rest of the pack upon its unprepared side. On the top of pack B lay the corresponding card, in readiness for forcing. This pack also to be placed on table.

Presentation. Advance with pack $A$ on the mat. Invite a gentleman to take it in his own hands and after shuffling, to pick out a card, and without looking at it, lay it face down on the mat. Remark: "I have asked you not to look at the card, because I find people fancy I find out br what is called thought-reading, and if you don't know the card yourself, I can't find it out that way, can I ? You are sure you don't know what card you have taken? I can honestly say that I don't. Now please notice that I don't look at it, or even touch it-I will place it here, where you can all keep an eye on it. You had better keep the other eye on me."

You accordingly place the mat on the table, in transit keeping the card just laid upon it in place by the pressure of the thumb, and just as you reach the table, under cover of your own body, turn over the mat, so as to bring the adhering card uppermost.

You then say, picking up the reel, "I must now introduce to your notice my telepathic tape. Like
myself, it isn't anything particular to look at, but it has an extraordinary talent for finding out things; even secrets that people don't know themselves. Now you will admit that the name of that card on the table is at present an A1, copperbottomed secret. Even the gentleman who chose the card doesn't know what it is; you don't know; in fact nobody knows. Nothing could well be more secret than that. But this tape will find it out. Will you, Sir,"-(addressing the gentleman who chose the card) "be kind enough to pass this loop over your left little finger. Thank you, and now I want some lady to assist me. Perhaps you will oblige, Madam?" A sufficient length of the tape is unrolled, and the reel placed in the lady's hands. "And now I will ask you to do me the further favor of taking a card from this other pack." (The second queen is forced on the lady.)
"Now, Madam, what was the card the gentleman chose? You don't know? Oh, yes, you do. The tape has told you. Unless it has betrayed me for the first time in my experience, it will have compelled you by an effect of sympathy to draw the very same kind of card as the one freely chosen, as you will remember from the other pack. What card did you draw? The queen of diamonds?" (Goes to table, and turns up card on tray.) "The tape was right, you see. The card the gentleman drew is also a queen of diamonds."

In default of the card mat, the trick can be
equally well performed by the aid of the card-box, or any other appliance for "changing" a card.

## A CARD COMEDY

This may be otherwise described for programme purposes as "A Royal Row," or "A Row in a Royal Family."

Preparation. Card mat loaded with two kings of hearts: one of them taken from the pack to be used: the other a spare card. The king of clubs and queen of hearts to be laid on top of pack. The two flower-pots on table.
Presentation. Advancing to the company, palm off the two top cards, and hand the pack to be shuffled. This done, force the palmed cards on two different persons. Then say, "I want you to take notice that I do not handle or tamper in any way with either of the cards you have chosen. Please lay them yourselves face down on this mat. Thank you. Now still without touching them I will put them temporarily in this elegant flowerpot, which you observe is quite empty. You see that it has neither top nor bottom, and nothing between. You couldn't have anything much emptier than that, could you?"

Having duly exhibited the flower-pot (this by the way must be the one without pocket) you let the two drawn cards slide off the mat into it, the two concealed kings going with them. Then,
assuming a perplexed air, you say, "I don't know why it is, but I have that peculiar sensation in my left thumb that always means that something has gone wrong. What it is in this case I can't imagine, but I must find out before we go further. As the two chosen cards have passed out of my hands, I may now ask the ladies who drew them to name them.
"The queen of hearts and the king of clubs, you say? Ah! that accounts for it. When those two cards come together there is sure to be trouble. The queen of hearts is a bit of a flirt, and the king of hearts is very jealous, particularly of the king of clubs, who is rather a gay dog, though he is old enough to know better. I fancy I hear some sort of commotion going on in the flower-pot." (You look into it.) "Yes, it is just as I feared. The king of hearts has found out that his queen has gone off with the king of clubs, and has followed the queen post-haste. Here he is, you see." (You plunge hand into flower-pot, and take out and exhibit the two drawn cards, and with them one of the two kings of hearts.) "It's too bad, for as a matter of fact the queen of hearts doesn't really care two-pence about the king of clubs. In fact she has even been known to call him a giddy old kipper.
"But I can't have my arrangements upset by these little family jars. To teach the king of hearts better manners I shall put him in solitary
confinement. We will drop him into the other flower-pot, which, as you see, is also empty." (The card is in this case not dropped through the pot, but into the pocket.)
"Now we shall be able to get on. No! my left thumb tells me that there is still something not quite right." (Glance into second flower-pot.) "Cpon my word, this is too bad. The king of hearts has already got away and followed the queen again." (Lift flower-pot, and show that the king has disappeared.) "I thought I had him safe, but his prison, as you see, is emptr, and here he is again in the first flower-pot." (Show the three cards accordingly.) "He is too many for me; I can't show you what I had intended. I must give it up and try something else."

Tariation. Load mat with a single king of hearts and the queen of clubs, the latter taken from the pack. Proceed as before up to the putting of the king in prison, and then exhibit the queen of clubs, as having come in pursuit of her spouse, the patter being modified accordingly. The imprisoned king of hearts will still be found to have escaped, but in this case to have returned to the pack.

For lack of the two flower-pots, the drawn cards may be dropped with the concealed pair into a borrowed hat, and the jealous king made to escape from a card-box, or some similar appliance.

Apropos of the card-box, by the way, I have
always had a sort of affection for this in its oldest and simplest form, viz., the reversible flat box with loose flap falling from the one into the other half at pleasure. I should not recommend the use of it at a school treat, as there would be much risk of some demon small boy proclaiming to all whom it might concern that he "knows how that's done," but before an average mixed audience its use is safe enough. Should one of the spectators happen to be acquainted with the box he will probably smile in a superior way, pluming himself on having a little inside information, though he may be no nearer the complete solution of the trick than the rest of the company.

The expert will easily guard himself against even this small risk. For example, he may use a duplicate box, innocent of guile, ostensibly merely to contain the cards he is about to use, and after turning the pack out of it upon the table, switch this (obviously empty) box for the faked box to be used later, or after using the latter he may extract the fake and the superseded card during the journey back to his table, where the box will of course be inspection-proof.

Better still, he may make matters absolutely safe by using an improved box, which has been christened the "Fast and Loose" card-box. This is a recent invention of an Italian wizard named Veroni, of Glasgow (an old soldier of Garibaldi). It is an idealised version of the old flat box, being
of the same shape, but a trifle larger. The loose slab is retained, but it is only loose when the performer desires it to be so. The box may be handled beforehand with the utmost freedom, and after a card has been placed in it it may be closed and re-opened any number of times, nothing happening till, "Presto," a mere touch in the right place, and the flap is free. When the box is now closed, this falls into the opposite portion, concealing the card, or producing another; and again locking itself, automatically, in its new position. The box in this condition will again stand the closest scrutiny.

Whether this box is yet placed upon the market I cannot say (having myself been favoured with a sight of an "advance" model), but it will certainly commend itself to all who appreciate a good thing in the way of ingenuity of contrivance and mechanical finish.

## A ROYAL TUG OF WAR

Preparation. Card mat to be loaded with king of hearts and king of diamonds, not taken from the pack in use. Flower-pots on table.

Performer advances with ordinary pack, delivering patter to something like the following effect. "It is not generally known, ladies and gentlemen, what a lot of human nature there is about a pack of cards. They have their likes and dislikes, and
their little tempers, just as we have. Some of them are bosom friends; others again hate each other like rival suitors to the same best girl. The four kings are generally pretty friendly, but there is a good deal of emulation between them, particularly between the two red kings on the one hand, and the two black ones on the other. Each pair claims to be the stronger, and they are always pleased to have a chance of putting the matter to the test.
"I will give you an illustration of this, by allowing them to hold a little tug of war. They have already had six trials, and each side has won three of them. This evening we will let them play a final game, which is to settle the matter. Will you, sir, kindly pick out the four kings for me, and lay them on this little tray. Thank you!" (This done, performer lays mat with cards on table.)
"I will drop the two red kings into this flowerpot." He takes them from the mat and after showing them drops them into the flower-pot (in reality into the pocket), "and the black ones into this other." (The black kings are allowed to slide directly off the mat, into the flower-pot, the concealed pair going with them. "Are your Majesties ready? Silence gives consent! Then Go!"
He waits a moment or two, and then looks over into the flower-pot with the pocket. "Nothing has happened yet. Yes, there goes the king of diamonds, pulled over to the other side. There's not
much chance now for the poor king of hearts, left single-handed. He won't hold out long. Yes! Now he is gone too."

Performer lifts flower-pot, with fingers inside pressing against pocket, and shows it apparently empty. "And here, in the other flower-pot" (lifts it and shows the four cards lying together on table) "are all four Kings. One more score to black. You didn't see the cards go? Of course rou didn't; because they fly horizontally, like the aeroplanes, and they go so fast that they get there almost before they have started."

## SYMIPATHETIC CARDS

Preparation. Card mat loaded with two cards of different denomination, sar the queen of clubs and the knave of diamonds, taken from the pack. Flower-pots on table.

Presentation. Force the corresponding cards of same colour (in this case the queen of spades and the knave of hearts), lay the pack aside, and take the drawn cards back face down on the mat, leaving them thus on table till needed. The patter may run as follows:
"As I think I hare mentioned before, the cards of a pack, from long association, become a sort of family. They have their likes and dislikes, just as human beings hare. In particular, there is a curious bond of sympathy betreen each pair of
the same colour, say the king of hearts and the king of diamonds, or the ten of clubs and ten of spades. If they are parted, and they possibly can, they will get together again.
"I will try to give you an example with the cards that have been drawn. We will put them for the moment in this pretty flower-pot, which, as you see, is quite empty." (Show by lifting it up, that it is so, and then drop the two cards from the mat into it, the concealed pair going with them.) "They will only require to be assisted by a gentle electric current, which I shall create by waving my wand, so.
"Before we go any further, will the ladies who drew the cards say what they were,-I don't mind asking you now, because they have passed ont of my control. The queen of spades and the knave of hearts, you say? A fortunate choice, for the queen of spades and the knave of hearts happen to be particular friends, so I think we may now be sure of success. Now to establish the wireless wave, and I doubt not the queen of clubs and the knave of diamonds will speedily find them. (Make any appropriate gesture with wand.)
"Did you notice a little flash, like the striking of a very inferior lucifer match in a gale of wind? That's when they went. Quick work, isn't it? The cards were timed by two gentlemen one evening, each with his own watch. By the one gentleman's watch they started at one minute past nine,
and by the other gentleman's watch, they arrived at one minute to nine, so it is clear that they must have made the journey in two minutes less than no time. But let us make sure that they have arrived." Lift the flower-pot, and show the four cards lying on the table together. "And now, to convince you that there is no deception, will some lady or gentleman kindly look through the pack, and make sure that the queen of clubs and knare of diamonds hare really left it." Which is found to be the case.

The trick may of course be worked with any two pairs of cards, the mat being loaded and the corresponding cards forced accordingly.

## TELL-TALE FINGERS

The discovery, in some more or less mysterious way, of an unknown card is one of the stock feats of the conjurer, and indeed in one shape or another is one of the most hackneyed of card tricks. But the wise magician never discards a good trick simply because it is an old one. He repolishes it, adds a bit here, takes away a bit there, presents it in a new shape and with new patter, and behold! the "chestnut" of yesterday becomes a latest novelty of today.

To obtain the maximum effect from a trick of the above kind, it is necessary in the first place to conrince the spectator that the drawn card cannot pos-
sibly be known beforehand to the performer; and in the second place to persuade him that it is discovered in some actually impossible (and therefore magical) way; taking advantage, where possible, of some known scientific truth which may lend colour to your suggestion. It is surprising, in conjuring matters, how much even the smallest percentage of fact increases the power of the average spectator for swallowing fiction. The patter for the trick which follows has been arranged upon these lines.

The requisites for the trick are a pack of cards from which three known cards have been withdrawn and palmed (or so placed to be in instant readiness for palming), a hand-mirror, and a silk handkerchief.

The introductory oration may run somewhat as follows:
"You all know, ladies and gentlemen, what an important part finger-prints now play in the detection of crime. Happily there is no connection between conjuring and crime, beyond the fact that they both begin with a $C$. No conjurer that I know of has ever murdered anybody or been murdered himself, and when a conjurer borrows a halfcrown, he always-well, almost always returns it. But each one of us, whether criminal or curate, burglar or bishop, possesses a definite set of fingerprints, quite unlike those of anybody else. And, what is more, we cannot touch anything, ever so
lightly, without learing upon it our sign manual in the shape of a more or less perfect impression of our fingers, imperceptible to ourselves, but quite visible to the expert in such matters.
"Practice in distinguishing such points forms a highly interesting study. Of course it must be pursued with a proper amount of tact, or it may get you into trouble, as in the case of a gentleman I once heard of who took up the study with more zeal than discretion. He said to his wife, not leading up to the subject gently, as he should have done, but in a peremptory sort of way, 'Maria, I want your finger-prints.' Unfortunately, Maria was rather a quick-tempered lady, and she had just been having a few words, of a hostile nature, with the cook. She slapped his face, and said, 'Well, now you've got 'em.' He had! They were very distinct, but not quite in the shape he wanted. I am going to ask permission to read some of your finger-prints, but, I trust without fear of such painful results.
"In the first place, I should like this pack of cards to be thoroughly well shuffled."

While this is done, performer palms the three known cards, and when the pack is returned, proceeds to force them on different members of the company. Each of the drawers is requested to allow his or her card to lie for a few moments face down on the palm of the outspread hand. The cards drawn are then returned to the pack, which
is again shuffled, and spread face upward on the table.
"Each of the three cards which have been drawn now has a complete set of finger-prints upon its surface, but there are no doubt others on many other cards, the result of previous handling. To enable me to distinguish the right ones, I must ask each person who chose a card to give me, for the purpose of comparison, a fresh impression, on the glass of this mirror. First, however, we must remove any prints that may already be upon it."

He accordingly breathes upon the glass, and wipes it carefully with the handkerchief.
"Now, Sir" (to the person who first drew), "will you kindly press your hand flat against the glass. Thank you. Not a very clear impression, but I dare say it will be good enough. I have now only to discover the card bearing the same imprint, and I shall know that it was the one you drew." (He picks it out from the exposed cards on the table.) "Here it is, I think, the - of -_" (as the case may be).

The other two cards are then discovered after the same fashion. As the performer knows beforehand what they are, this will give him little trouble, but he will be wise, for the sake of effect, not to discover them too readily. For the same reason, great importance should ostensibly be attached to the thorough cleaning of the hand mir-
ror before each new attempt, so as to get a clear impression.

The trick as abore described can be worked with any pack of cards, but where those used are the performer's own property, he can make it even more effective by marking the three cards to be freed in such a way as to be distinguishable (by himself only) by their backs. The drawers in this case are requested to press their hand against the $b a c k$ of the card, and the cards are spread face down upon the table, the performer apparently not knowing the nature of the card indicated to him until he has turned it up.

## DIVINATION DOUBLY DIFFICULT

This trick, though it merely rests upon a combination of methods already familiar to the expert, may as a whole fairly claim to be a complete novelty. The mise en scène is so simple, and the room for deception apparently so small, that to the uninitiated it seems like a genuine miracle. Unlike most card tricks, it is eren better adapted to the stage than to the drawing-room.

The effect of the trick, baldly stated, is that the performer divines the nature of nine cards, selected apparently quite haphazard, and then picks out the corresponding cards from another pack, freely shuffled and covered by a handkerchief.

The requirements for the trick consist of two packs of cards, and an envelope with adhesive flap, of such a size as to accommodate one of them. One of the two packs is a "forcing" pack, consisting of three cards only, each seventeen times repeated. The cards of each kind are however not grouped all together, as is usually the case, but are arranged after the manner explained in More Magic (p. 13), viz.: assuming the three cards to be the knave of clubs, the seven of spades, and the nine of diamonds, the pack will consist of groups of those three cards, in the same order, repeated throughout. The effect of this arrangement is that, wherever the pack be cut, the three cards above or below the cut will always be a set of those three cards: and the same result follows, however many times the pack may be cut, or however many such groups may have been taken from it.

The second pack has no preparation, but the three cards corresponding to those of which the forcing pack is composed are so placed as to be ready to hand for palming.

The performer advances with the forcing pack, meanwhile executing a false shuffle of the kind which leaves the pack as if cut, but otherwise undisturbed as to order. Holding the pack on the outstretched palm of his left hand, he invites someone to cut it. This done, he takes back with the other hand the upper portion of the cut, and says, "You have cut where you pleased, have you not?

If you think I made cut at that particular point, you can cut again. You are satisfied? Then I will ask you to be good enough to take three cards from the top of this lower heap. Keep them carefully. Don't let me see them: in fact don't show them just yet to anyone, but please remember exactly what they are." He replaces the top half of the cut, and passing to another spectator, at some little distance from the first, has the pack cut again, and a second three cards taken in like manner. This is repeated with a third person, just far enough away from the second as to preclude any possibility of the three drawers comparing their cards.
"Now, ladies and gentlemen, you must all agree that I have not sought to influence the choice of these gentlemen" (or ladies, as the case may be) "in the slightest degree, and it must be equally clear to you that I cannot possibly know even one of the cards that have been chosen. To make sure that I do not get sight of them in any way, we will have them placed, with the remainder of the pack, in this envelope." He collects the cards accordingly, allowing each person who drew to replace his cards himself in the envelope, and requesting the last person to moisten the flap, and make all secure.

Returning to his table, he places the closed envelope in full riew. "I shall now want the assistance of some gentleman. Thank you, sir.

Will you kindly shuffle this other pack for me." (He runs the cards over fanwise, showing their faces, so as to prove that they are an ordinary mixed pack: then hands them to be shuffled, and while this is being done, palms the three secreted cards. "Shuffle them thoroughly, please, and then spread them a little, faces down, upon the table, and lay your handkerchief over them.
"Now I am going, in the first place, to attempt a little thought-reading. I shall endeavour by that means to discover the three cards each person chose, and then, by means of the sense of touch, which I have cultivated to a rather unusual degree, to pick them out, without seeing them, from among the cards under the handkerchief. I shall only ask one indulgence. To leave a little margin for possible mistakes. I shall ask your permission to pick out four cards instead of three for each person, so as to give me one extra chance. Will the gentleman who drew first kindly look my way, and say to himself slowly, the names of the cards he drew. Thank you, Sir! I think I read them right." He inserts his hand under the handkerchief, and after a little pretended fumbling, brings out the three palmed cards, with one indifferent card in front of them. He does not show or look at them, but asks the second chooser to think hard of his three cards, afterwards taking four more from under the handkerchief. Having done the same in the case of the third drawer, he spreads
the twelve cards he has taken from under the handkerchief, and shows them fanwise. Addressing the first drawer, he says, "Your three cards are among these, I think, sir?" and the same question is then addressed to the other two choosers, the answer being of course in the affirmative.
"Now, gentlemen, in order to prove that there is no deception, I will take away three cards at a time, one from each set of three. Pray observe that from beginning to end, I have not looked at the face of any card." He accordingly removes one of the forced, and two of the indifferent cards, making however some pretence of selection and throws them aside. "There are now only two cards belonging to each gentleman left. That is so, is it not?"

The question is addressed to each of the three drawers in turn, and answered accordingly, after which the same process is again twice repeated.
"And now, gentlemen, we have three cards left, belonging to neither of you, which is just as it should be. It is a peculiarity of this experiment that if it comes out right it always brings good luck to those taking part in it, so you may all fairly expect to live happily ever afterwards, and I trust you will."

If the performance is given before the family circle, or very intimate friends (who sometimes consider themseles privileged to be disagreeable), it is just possible that some ill-mannered person,
in the hope of embarrassing the conjurer, may ask at the close to be allowed to examine the envelope containing the drawn cards. Such an examination, if permitted, would of course largely give away the trick. If the performer has any reason to fear such a contingency, he may guard against it by "switching" the envelope, during his return to the table with it, for a duplicate containing an ordinary mixed pack. In some part of this the three cards corresponding to those drawn should be placed together, as the obnoxious person, if himself one of the drawers, will naturally expect so to find them.

At a public performance such a precaution would be supererogatory.

## A NEW LONG CARD PACK AND A TRICK DEPENDENT ON ITS USE

Some few months ago I was shown by a clever amateur, Mr. Victor Farrelly, a pack of cards prepared, after a method of his own, to replace in a more subtle form, the familiar biseauté pack. Mr. Farrelly's plan is to round off, in a very minute degree, three of the corners of an ordinary pack. If a given card be turned round in a pack so treated, it is obvious that its unfiled corner will project, to a microscopic extent, beyond those above and below it, rendering the card instantly discoverable by touch.

Mr. Farrelly's idea is decidedly ingenious, but the uses of the biseauté pack are rather limited, and the fact that the pack must be reversed before the card is replaced in it is a drawback. It struck me , on reflection, that the idea might be developed, in a slightly different direction, to greater advantage.

My own plan is as follows: Two packs, exactly alike are used. As to one of these, I treat all four corners after the manner indicated by Mr. Farrelly, when any card of the second pack, inserted into the one so treated, naturally becomes in effect, a long card. There is in this case no need to reverse the pack, and as the minute projection is duplicated at each end of the diagonal, a less degree of rounding off is necessary.

As a practical illustration of the possible uses of such a pack, I offer the trick which I am about to describe. The expert will recognise that, save for the use of the new pack, it is merely a combination of well-known methods, but as regards the mode of presentation it is original, and I think will be found worthy of a place in the répertoire of the card-conjurer.

For the purpose of description we will call the pack with rounded corners the "short," and the other the "long" pack. Three known cards are borrowed from the long pack, which may then be put aside, as it plays no further part in the trick. These three cards are palmed, and after the short
pack has been shuffled by one of the company, are added to it, and forced upon three different spectators. We will suppose that the three selected cards are the queen of hearts, forced on a gentleman; the king of clubs and the ten of diamonds; the two last mentioned forced on ladies.
This done, each of the drawers is invited to replace his or her card in the pack, which is passed from the one to the other for that purpose, and before it is returned to you is once more shuffled. You then deliver a "yarn" to something like the following effect:
"Please bear in mind, ladies and gentlemen, exactly what has been done. To begin with, you have seen that the pack was thoroughly well shuffled. Three cards were then freely chosen from it. They have been put back, not by me, but by the persons who drew them, and the pack has since been shuffled again. It is therefore obviously impossible that I should know either what cards have been chosen, or whereabouts they may now be in the pack. But I enjoy impossibilities. The more impossible a thing is, the more I want to do it. I will find out these cards or die! Don't be alarmed, I don't mean to die just yet; so I must do the other thing. It's easy enough, if you know how to do it.
"In the first place I cut the pack into three portions." (You cut three times, nipping the "long" corners between second finger and thumb, at each
of the drawn cards in succession, and placing the cards left at bottom on one or other of the three heaps; then solemnly rub your wand, without remark, with a silk handkerchief, and lay it across the tops of the three packets.)
"Now, if the electric influence is strong enough, the three chosen cards will gradually sink down to the bottom of these three heaps. A nice easy way of finding them out, is it not? It will take a minute or two for the charm to operate, so in the meantime I will try to find out the names of the cards for myself by thought-reading. You drew a card, I think, Sir? Will you kindly think of that card, as hard as you can, and meanwhile look straight at me? Thank you. Judging by physiognomy, I should say that you were rather a ladies' man. Don't blush, Sir. It's nothing to be ashamed of, is it, ladies? But he did blush, didn't he? Now, being a ladies' man. you will naturally have chosen one of the ladies of the pack, that is to say one of the queens, and your blush suggests that it was a red queen. Now there are only two red queens to choose from. The queen of hearts represents Love, and the queen of diamonds Money. If I read your thoughts aright I feel safe in declaring that you chose the queen of hearts. That is right, I think? Quite simple, when you know how it's done.
"And now, Madam, for your card. I can see at a glance that you have a liking for aristocratic
society, and you will therefore naturally have chosen a king. But which king? Think hard of your card, please. A picture of a dark-complexioned gentleman comes up before my mind's eye, and I feel that I can say with confidence that the card you chose was the king of clubs. Am I right?
"And you, Madam. I have an idea that you have a taste for pretty things; particularly jewellery. Such being the case, you would naturally choose diamonds. Think of your card, please. Thank you. I see I was right in my guess. The card you chose was the ten of diamonds.
"And now to verify my discoveries. If my wand has done its work, those same three cards will now have percolated through the rest, and settled down at the bottom of these three heaps. Let us see whether they have done so." (The three heaps are turned over.) "Yes, here we have them: the king of clubs, the queen of hearts, and the ten of diamonds. It is a curious thing for the cards to do, and I daresay you would like to know how it is done. As a matter of fact, it is done by synthetic readjustment of dissociated atoms. You don't know what that means, perhaps? Well, to say the truth, I don't quite know myself, but that is the scientific explanation, so no doubt it is correct."
The trick may very well end at this point, but if the reader possesses a card-box, or other apparatus adapted for "vanishing" cards, he may bring
it to a still more striking conclusion. In this case he may continue as follows:
"Now, I should like to show you a curious effect of sympathy. I take away these three cards and hand the rest of the pack to the gentleman who drew the queen of hearts. Kindly hold it up above your head where all can see it. The three drawn cards" (show them one by one) "I place in this box. Again I electrify my wand a little, and lay it across the box. Now I want each gentleman or lady to think of his or her card. Think of it kindly, and feel as if you would like to see it again. Think hard, please, because it is you, not I, that perform this experiment, and if you don't think hard it will be a failure. I am pleased to see by the expression of your countenances that you are all thinking hard. Thank you very much. You may leare off now. The deed is done. The three cards have left the box, and gone back to the pack. Please look it through, sir, and tell the company whether it is not so."

The reader, being familiar with the wiles of conjurers, will doubtless have guessed that the three cards supposed to have returned to the pack have in fact never left it, being those naturally belonging to it, corresponding with the three long cards. But to the outsider their supposed return will be, in the words of the lamented Lord Dundreary, "one of those things that no fellow can understand."

As regards the disappearance of the three cards, the performer is of course by no means restricted to the use of the card-box. If he is an expert in sleight-of-hand, he may with even better effect, "vanish" them one by one by means of the back palm, dropping them a moment later into the profonde.

## THE MASCOT COIN BOX

This is a little device on the same principle as the well-known flat card-box, but adapted for use with coins, and with an addition which largely increases its utility inasmuch as it will not only enable the performer to "change" or "vanish," but to get instant and secret possession of a coin placed in it.

The box (see Fig. 14) is of ebonized wood, unpolished, and in size about three inches square. It consists of two parts ( $a$ and $b$ ), which are alike in size and appearance, so that either half may be regarded as "box" and either as "lid," at pleasure, according as the one or the other is made uppermost, no difference being perceptible between them. In the centre of each half is a circular well, not quite two inches in diameter.

Used with the box is a thin dise of wood corresponding to that of which the box is made. This is of such diameter as to fall easily from the one well into the other, according to the way in which the box is turned, but on the other hand fits so
closely within that its presence or absence is not perceptible to sight. If a coin be laid in the box upon the disc and the box is then closed and turned over, the dise settles down over the coin in the opposite half, either leaving the box apparently


Fig. 14
empty or exhibiting in place of the original coin a substitute with which the opposite side of the box has been previously loaded.

Thus far, as the reader will doubtless have perceived, the effect produced (save that a coin instead of a card is dealt with) is precisely the same as in
the case of the card-box. But the "mascot" has a speciality of its own, in the fact that in that half of the box marked $a$ (see Fig. 14) a horizontal slot is cut on the side opposite to the hinge, just long enough and wide cnough to allow the passage of a halfcrown. The wood being dead black, this small opening is invisible save to close inspection, which the box is never called upon to undergo.

When it is desired to gain secret possession of a coin lent by one of the company, the lender is invited to place it himself in the box, held open bookwise as in Fig. 14, the side $b$ of the box having been previously loaded with a duplicate coin.
The lender of the coin may place it in whichever side of the box he pleases, but the manner of closing the box will vary accordingly. If he places it in the side $a$, the opposite (or loaded) side is treated as the lid and turned down over $a$. In this case, the coin being already in the slotted half, no turnover of the box is necessary, the performer having merely to allow the coin to slip out into his hand. In the opposite case, viz., that of the coin being placed in $b, a$ is treated as the lid, and the coin being in this case above the disc the box must be turned over before it can be extracted. If preferred the performer can hold the box so that the coin will naturally be placed in $b$, but in this case the turn-over is unavoidable.

When the box is again opened, the duplicate coin is revealed in place of the original, which is mean-
while dealt with as may be necessary for the purpose of the trick. After the borrowed coin has been extracted, the further fall of the dise closes the slot, and bars any possibility of the substitute coin escaping in the same war.

The following will be found an easy way of working the exchange.
"For the purpose of my next experiment," says the performer, "I shall have to ask the loan of a halfcrown; marked in such a way that you can be sure of knowing it again. I should like one, if possible, that has seen some service, for a coin in the course of circulation imbibes a certain amount of magnetic fluid from each person who handles it; and this renders a well-worn coin more susceptible to magical influences than a new one."

The reason alleged for asking the loan of an old coin is of course "spoof," but there is a reason; and it is twofold. In the first place it ensures your getting a coin tolerably like your own; which you have chosen in accordance with that description, and which you have marked after some commonplace fashion, say with a cross scratched upon one of its faces. Secondly, a well-worn coin, haring lost the sharp edge which is caused by the milling in a new one, passes the more easily through the slot, which for obvious reasons is kept as narrow as possible.

Performer, advancing toward the person offering the coin, continues:
"I don't want even to touch the coin myself till the very last moment, so I will ask you meanwhile to put it in this little box. I believe it was built for a watch-case, but as I don't happen to need one, I use it to hold my money, when I have any, or when I can get somebody to lend me some."

The box is held open bookwise, as above mentioned, and closed according to circumstances, in one or the other of the two ways described.
"I will now ask some gentleman to take charge of the coin in the box. Who will do so? You will, Sir? Thank you. But stay! I think I heard somebody say (it was only said in a whisper but I heard it) 'I don't believe the halfcrown is in the box.' It is very sad to find people so suspicious, especially when I take such pains to prove that there is 'no deception.' But the gentleman was wrong, you see." (He opens box, and shows the substitute coin.) "Here it is. Take it out, sir, and keep it in your own hands till I ask you for it again."

During the delivery of the patter the borrowed coin has been extracted, and the coin exhibited in the box and handed for safe-keeping is, of course, the substitute. The box, as being no longer needed, is laid without remark upon the table, and the trick proceeds, after whatever may have been its intended fashion.

## MISCELLANEOUS TRICKS

## MONEY-MAKING MADE EASY

Requirements. Coin mat loaded with two double pennies, shell side undermost. Lighted candle and velvet mat (with pocket) on table.

Presentation. Performer comes forward with coin mat hanging down in his right hand (mouth of loaded space upwards), and asks for the loan of a penny, marked in some conspicuous war. Receiving it on the mat, he shows it, so placed, to the persons, seated on each side of the owner, in so doing making it obvious to them, without remark, that his hands are otherwise empty. Then returning to his table, with the mat and the coin on it still in his hand, he delivers patter to the following effect:
"Now I am going to show you a nice easy way of making money. I was told when I was a small boy, 'Take care of the pence, and the pounds will take care of themselves.' I believe they do. The pounds take such good care of themselves that very fer of them seem to come my way. But you can make a bit even with pennies, if you know how to set about it. All you need is a really good penny to start with. It doesn't matter how you get the penny. You may beg, borrow, or steal it. Per-
sonally, I prefer to borrow it. If you try the other' two ways you get yourself disliked, but you can always get people to lend you things, if you ask prettily; and I've always been celebrated for my nice borrowing manner. You must all have noticed that the gentleman lent me a penny without the slightest hesitation. I daresay if I had asked him, he would have made it two-pence, or even sixpence, if he had as much about him. In this case, however, one penny is enough for my purpose; and here it is with the owner's own mark upon it. Observe that it is just a plain ordinary penny, and you can see for yourselves that it is the only one I have-in my hands, I mean. I am always truthful. As a matter of fact, I believe I have another in my left trouser-pocket, but I promise you that I won't use it."

Pass mat, with coin on it, from one hand to the other, showing the hands otherwise empty, and leaving the mat finally in the right hand: then let the marked coin slide off it into left hand, the concealed coins passing with it. Put down the mat, and show all three coins together (the marked coin in front) held between fore-finger and thumb, broadside toward the spectators. Thus held, they are, even at a few feet distant, undistinguishable from a single coin.
"Now I am going to make money. Not much, perhaps, in fact only a penny at a time. I shall start by making this one penny into two. Cent
per cent is not bad, is it? Observe, I use no violence. It's all done by kindness. I just warm the coin a little over this candle-flame. That softens the metal and I am able to squeeze another penny out of this one, so!'"

Show as tro accordingly, by sliding off the hindermost coin in its shell, exhibiting it on both sides, and laying it on the table.
"You have all heard of turning an honest penny. Well, this is one may of doing it. It is said, too, that one good turn deserves another. so we'll try again. I warm the first penny a little more, and again I pull another out of it." (Draw second double coin from behind the original penny.) "Now we have three, two in my hands" (showing one in each hand) "and one on the table.
"I think I heard somebody say that I couldn't make any more? I don't like to do it, because the process takes a good deal out of the original penny, and I might spoil it. On the other hand, I don't like to decline a challenge, so here goes! I warm these two again, and then, with a little extra pressure, because it naturally becomes more difficult each time. I get yet another penny, as you see. So now, in all, we have four." (Show those in hand as three, by drawing solid coin out of shell. then, picking up double coin from mat, show as four accordingly.) "Did I hear a lady say 'Just one more'? Well, then, one more." (Develop the double coin just picked up, and show as five.)
"But here I must really draw the line. If I kept on like this, there would be none of the original penny left. It is already getting weaker and weaker. Besides, there wouldn't be time for anything else, and I have several still more wonderful things to show you.
"And now to put these extra pennies back again into the original coin. At present it is only onefifth its proper weight and if the owner tried to pass it in this condition there would be trouble. I should explain, by the way, that these others are not really solid coins: though they look like it. They are what the spiritualists call astral coins, if you know what that means: I don't quite know myself; so I won't attempt to explain, but I believe in the Police Courts they are known as "duffers.'"

Lay all five coins on the velvet mat, each of the shells slightly overlapping the solid coin to which it belongs.
"Here we have one, two, three, four, five. I pick up two of them." (Draw shell over solid in act of picking up.) "I give them a gentle squeeze and they become one only." (Show as one, and replace on mat behind the mouth of pocket.) "Now I treat two more in the same way." (Repeat accordingly, replacing these also, as one, on mat.) "We have now only three left. Let me see, which is the original? Ah! here it is, with the owner's mark upon it." (Pick it up and show in left hand.) "Now I rub one of these others into
it." ( . $a$ ake the morement of picking up one of the double coins, and of rubbing it into the coin in left hand, but in reality "ranish'" it, in the supposed act of picking up, into the pocket of mat.) "And now I pass this other one into it in the same way, and we have only the original penny left. It is like the ten little niggers. isn't it. only that they never came back. Here is your pemy, Sir. Please observe that it still has your own mark upon it, which is proof positive that there has been 'no deception.' '"
N. B. If the performer is a norice. he may simplify the trick by loading the coin mat with one double and one ordinary coin only, or two ordinary coins, limiting the successive productions accordingly.

## THE MISSING LINK

At an early period of $m y$ magical career, I devised a trick to which I gare the name of Concatenation Extraordinary, and which will be found described in Later Magic, page 94 . In effect it consisted of the magical welding of a number of loose iron links into a continuous chain. It was performed by the aid of a Black Art table. a bottomless tumbler, and a silk thread. "Though I say it that shouldn't," it was an ingenious trick, and I was rery proud of it. Unfortunately, some good natured friend (I rather think it was

Mr. David Devant) pointed out to me that about ninety-five per cent of my ingenuity was wasted, inasmuch as the same effect, so far as the spectator was concerned, could be produced by infinitely simpler means, viz.:-by using a glass with double mirror partition, when all the other paraphernalia became unnecessary. You had only to load the hinder compartment with the complete chain, and after a due amount of "talkee-talkee," drop the loose links into the forward one, turn the glass round, and the deed was done.

The trick, as a trick, was just as good in its new shape as before, but being at that time (comparatively) young and foolish, its extreme simplicity spoilt it for me, and I lost all interest in it. Not long since, however, I was reminded of it by coming across the chain and links which had figured in my performance of the trick, and it struck me that, in a slightly modified form, it may still be worth the attention of the drawing-room conjurer.

The requirements for the trick in this, its latest form, are as follows:

First, the mirror glass; and as to this I may note in passing that the "mirror" is best made of tinplate, not too highly polished, in place of the look-ing-glass plate which was, until a quite recent period, generally employed for the purpose.

Secondly, a length of small iron chain, made up of twenty-six links, connected in the centre by a twenty-seventh link of brass.

Thirdly, two shorter lengths of similar chain, consisting of thirteen links each, and a loose brass link, corresponding to the one in the centre of the longer chain. The complete chain is to be placed at the outset in the hinder compartment of the mirror glass, which should be of such a size that the chain nearly fills it.

Lastly will be needed a bottle containing Eau de Cologne, of which a few drops have been poured on the chain in the glass.

The patter may run to something like the following effect.
"You are doubtless aware, ladies and gentlemen, that electricity is now largely employed in the welding of metals. Of course to produce such aresult on a large scale, such as welding guns, enormous strength of current is required; amounting in fact to millions of ampères, or volts, or ohms, or watts. I blush to confess I don't know which is which, but it's of no consequence. If I had ever so many ampères, or the rest of it, I shouldn't know what to do with them. I am only able to manufacture my electricity on a very small scale, but with the aid of a little magic, I get very good results.
"You are also no doubt aware that when certain metals, particularly copper and zinc, are brought into close connection, an electrical current is set up between them. The same thing applies, in a
less degree, to iron and brass, as I hope to be able to show you.
"I have here two short lengths of iron chain. Will somebody be kind enough to count the links? You will find, I think, that there are exactly thirteen in each. Please notice this, because, in some mysterious way, it has something to do with the success of my experiment. You know thirteen is an unlucky number, and the chains themselves don't like to consist of that number of links, and if they can alter it, they try to do so. I am going to give them the opportunity, with a little electrical assistance. Thirteen, as I have said, is an unlucky number, and twice thirteen makes twenty-six, which is not much better, but if you add one more, you get twenty-seven, which is a very lucky number indeed. Everybody knows that three is a lucky number. Three times three are nine, which of course must be luckier still, and three times nine are twenty-seven, which is naturally best of all.
"Now I am going to give these two chains an opportunity to convert themselves into that lucky number, by taking in this extra link, which as you perceive is brass, an opposition metal. Observe, I drop one of the chains into this glass. See that I do so fairly. Then I drop in the single link, and lastly, the other piece of chain. And now, in order to set up an electrical reaction, I add just a few drops from this bottle of Eau de Cologne. As a matter of fact, a little salt and water would have
the same effect, but I use Eau de Cologne because it smells nicer. And now I must ask the loan of some lady's handkerchief, to cover the glass, and concentrate the electric current."

Holding the handkerchief in right hand, pick up the glass with left hand, and raise it a few inches from the table. In lowering it. corer it with the handkerchief, and at the same time give it the necessary half-turn. Take out your watch, and make believe to time the operation, remarking, "I find it needs a full half-minute, to allow the charm to work. Time! Let us see how we have succeeded."

Take off the handkerchief, and draw the chain slowly out of the glass. "Yes. All is well. I should say welded, and I trust you will sar, 'Well done.' The chain is complete, and now consists of twenty-seven links, the lucky number. Perhaps some gentleman will verify the fact.
"I must tell you frankly that I don't guarantee the correctness of my explanation. I can't say exactly how much the electricity has to do with it. I only know that if you go to work the right way, which means, do as I do, you get the result, and there you are. This experiment alwars provokes a lot of discussion. The other erening one gentleman said it was done this way. A lady said it was that way, and a sharp boy (the younger they are the more they know) was quite sure it was done another way altogether. But they were all wrong.

It is done just the way I have shown you, and if you do as I do, and say as I say, you will no doubt produce the same result. ${ }^{1}$ If you don't, well, you will be no use as a conjurer, and you had better go into some other business."

Some less instructed reader may possibly enquire, "But why the Eau de Cologne? What does that do ?" Precisely nothing, and therein lies its virtue. As indicated in the section on "patter" (post) it often happens that some little bit of spoof, supererogatory in reality so far as the spectator is concerned, is accepted as covering the real key to the puzzle. This is a case in point. Taking it for granted that the Eau de Cologne would not be used without some reason, the spectator sets to work to discover that reason, and so gets farther from the real solution.

## CULTURE EXTRAORDINARY

The root-idea of this item must be credited to Signor Antonio Molini, the inventor of the very effective stage trick known as Le Souper $d u$ Diable. The principle on which that trick is worked is so subtle, and withal so simple, that it is surprising that it has not long since been applied to the production of less bulky objects than the tablecloth, eatables and drinkables which figure in

[^5]the Satanic supper. The following is an application of the Signor Molini's idea on a scale better adapted to the drawing room.

Requisites.
(1) Three zinc or zinc-lined tubes, as $a, b, c$ in Fig. 15, ranging in height from about three inches


Fig. 15
upwards, and graduated in size so as to fit easily one within the other.
(2) Three balls, one red and two white of such diameter as to pass easily through the narrowest tube. Two smaller balls, one red and one white. about half an inch in diameter.
(3) A box of matches.

Each of the two smaller tubes ( $c$ and $d$ in diagram) to be loaded with one of the larger white balls, suspended from the upper edge of the tube by a wire hook, shaped as $a$ in Fig. 16, connected with the ball by a loop of fine silk or cotton thread. The red ball is vested, and the two little balls may


Fig. 16
rest in a shallow tray or other appropriate receptacle on the table, deep enough as to conceal them from the view of the spectators.

Introductory Patter. "You have no idea, ladies and gentlemen, what a lot of hints I get from different people for the improvement of my entertainment. If I were to adopt them all, I have no
doubt it would be very fine indeed. The worst of it is that it would take a year or two to try them, so for the present I am obliged to leave things as they are.
"You will observe that I have here three tubes" (showing No. 1 and passing wand through it to prove it is empty), "quite ordinary tubes, with a hole at each end, and nothing at all between. I don't suppose you would notice anything to object to about them, but some people are so very particular. A gentleman who said he had an artistic eye (I don't know which eye it was) said to me, 'Look here, Professor, that trick of yours would be ever so much better if you had all those tubes the same size. That lot looks as if you had picked them up at a jumble sale.' ${ }^{1}$ I explained to him, kindly but firmly, that there was a special reason for having the three tubes of different sizes; namely, that by so doing it was made possible" (suiting the action to the word) "to pass this one (No. 1) over this other (No. 2) ; and this again over the smallest one, thereby saving much space in packing. He said, 'Never mind, you take my tip and make 'em all the same size.' I dare say he was right, but I haven't had time to do it yet."

During this little harangue, which appears to be mere "spoof," you have practically worked the trick. Suiting the action to the word, you have passed the largest tube No. 1 over No. 2 and lifted

[^6]it off again. In its downward movement the tube passes over the little hook on No. 2 ; but in lifting it off again its upper edge comes within the outer arm of the hook, and carries this off with the ball attached to it, leaving tube No. 2 empty. The latter, shown empty accordingly, is passed over No. 3 and carries off its load in the same way.

You have thus proved (!) in the most convincing way that all three tubes are emptr, though as a matter of fact No. 3 is the only one in that condition, Nos. 1 and $\underline{2}$ each containing a suspended ball.

The patter from this point may rary according to the fancy of the performer. If he has the knack of producing the appropriate combination of fact and fiction, it is preferable that he should do so for himself. As I hare elsewhere remarked, borrowed patter rarely comes so "trippingly on the tongue" as that of which the performer can say with, let us hope, undue depreciation of his merits, "a poor thing, but mine own."

The fable with which I should mrself introduce the trick would run somewhat as follows:
"You have all heard. ladies and gentlemen, of intensire culture, gooseberries grown while you wait, and that sort of thing. It is done br enclosing the seed, or the young plant, in a confined space and keeping it warm and comfy. It has always seemed to me that there is a good deal of magic about the process, and I thought I would like to
try it myself, but it would be no good my trying to grow vegetables. I shouldn't have room to grow more than one radish, or one spring onion at a time, which would hardly be worth while. I finally decided to grow a few billiard balls, for use in my entertainment, and I'll show you how it's done.
"You must please imagine that these three tubes are three hothouses on the new system." (Picks up and exhibits one of the little white balls.) "Of course everything has to be raised from seed in the first instance, but it would take too long to show you the whole process from the beginning, so we will start with this little ball, grown from seed last night. In its present condition it is too small to be of any use, but by means of my intensive culture we can soon make it grow larger. I will drop it into No. 1 forcing house."

Performer shows little ball in right hand and makes believe to transfer it to the left, in reality rolling it, as in the well-known "Cups and Balls" trick, between the roots of the second and third fingers. The left hand, held above tube No. 1, makes the movement of crumbling an imaginary ball into it. "Now we will plant another in the same way."

You pick up apparently another little white ball, but in reality the same; which has remained in the right hand. Now. however, it will be well to vary the sleight used, so you show the ball between the
second finger and thumb of the left hand, and apparently take it back by means of the pincette or tourniquet; then professedly dropping it into the second tube.
"And now, to complete the set, we shall have to grow a red ball. Here is a seedling of that colour." You pick up the little red ball, and make believe to pass it after the same fashion into the third tube.
"And now to supply the heat. We do not need much, the space being so confined. I find that even the flame of a match is sufficient."

You strike a match and move the flame round and round within the top of the larger tube till the thread catches fire and releases the ball. Should this be heard to drop, you account for it by remarking "I dare say you noticed a little explosion. That is caused by the sudden radio-activity of the component atoms re-arranging themselves in the expanded form." You raise the tube and show the ball: then go through the same process with the second tube. Under cover of raising this tube to show the ball, you get the large red ball from the vest into the left hand and palm it.
"Perhaps you would like to watch the progress a little more closely." You pick up the third tube and place it upright on the palm of the left hand, in so doing introducing the palmed ball from below, and advance with it to the company.
"The red balls are especially sensitive to heat.

Even the warmth of the breath is generally enough for these. Anyhow, we will try." You breathe into the tube, and lifting it show the ball, then offering both tube and ball for inspection.

It will hardly be necessary to point out to the acute reader that the alteration of procedure in the case of the last tube is rendered necessary ; first, by the fact that the tube up to that point contains no ball, and secondly in order to avoid the difficulty of striking a match with the right hand onlv, the left being otherwise occupied.

The trick may appropriately be followed by the exhibition of a few of the usual ball sleights. If it is worked on a "black art" table it may be brought to an effective close br the "dematerialisation," in succession, of the three balls.

## THE BOUNDING BEANS

This is another application of the principle introduced by Signor Molini and utilised in the trick last described.

The requisites for the trick are as follows:
(1) Mirror glass; at the outset, empty.
(2) Two tubes of cardboard, sheet brass, or zinc, as A and B in Fig. 17. The height and width of A are about $31 / 2$ and $21 / 2$ inches respectively. $B$ is a little taller, but a trifle less in diameter.
(3) A third tube, C, with its lower edge turned inward an eighth of an inch all around. This tube
is a little shorter than A , and in diameter a trifle smaller than $B$, which must pass easily over it. Attached to either side of its upper edge, outside, are soldered two little wire hooks, the points on the outside directed downwards.
(4) A coil of paper ribbon, of such size as to fit closely into the lower end of C, and forming, when


Fia. 17
so placed, a temporary bottom to it. The inner end of the coil must be drawn up an inch or so, so as to form a little cone in the centre.
(5) A similar coil unwound into a loose mass of paper ribbon.
(6) About three-quarters of a pint of haricot beans. Of these a sufficient number must be poured into $\mathbf{C}$ (around the little cone), to fill it.

The remainder are to be brought forward on some sort of tray. ${ }^{1}$

C loaded as last described, is to be placed within B.

The trick may be introduced as follows:
"Most of you, I dare say, have seen the little natural curiosity known as the Jumping Bean. To all appearance these are just like other beans; but if you spread a dozen or so of them on the table and watch them carefully, you presently see one or more of them turn over, or even make a little jump. A young and lively bean will sometimes hop as far as half an inch.
"Scientific gentlemen tell us that their agility is caused by a little insect inside the bean. When he wags his tail, or scratches himself with his hind leg, it causes the bean to turn over, or to make a hop. That seems to me rather a lame explanation because there is no hole in the bean that the insect could possibly have got in at. I believe myself, that they are in truth magic beans, and I have been trying to train some beans of my own to do the same thing on a larger scale, and in such a way that you can all see them do it.
"Here are my beans." (Show those on tray.) "Examine them as much as you like. The more you examine them, the more you won't find any-

[^7]thing particular about them. You won't notice any difference between them and any other beans, but as a matter of fact they are a good deal more energetic than beans of the ordinary kind, and when they get to know and love you, they will do all sorts of remarkable things.
"I will pour a few of them into this glass." (The front compartment of the mirror glass is filled to about two-thirds of its height.) "To prevent their getting out again without your knowing it I will press them down with a handful of these pretty paper shavings."

This is also done, the quantity of paper being so regulated, in accordance with previous experiment, that when pressed down it shall come half an inch or so below the brim of the glass.
"To make matters still more secure I will ask the loan of a lady's handkerchief to cover the glass with."

The handkerchief is taken in the right hand, the left meanwhile raising the glass a little way to meet it. In covering and lowering it again to the table the needful half-turn is made.
"I will not touch the glass again until the experiment is finished. Meanwhile I want to call your attention to these two tubes. You will observe that one of them is slightly larger than the other. A gentleman told me the other evening that I was wrong in saying so. He maintained that the one was smaller than the other. I didn't argue with
him. I never do with that sort of man. It is just a question of the point of view. Anyhow, I had the one made larger, or the other one smaller, whichever way it is, so that the one can go comfortably over the other, like this."

A, first carelessly moved about so as to show clearly that it is empty, is brought down over B and lifted off again, carrying off within it C and its load; after which $B$ is in turn shown to be empty.
"Now I am going to order the beans to jump out of the glass and into one or other of these empty tubes, at your own choice. Right? or left? Which shall it be ?"

Performer asks the question standing behind his table, and by means of the familiar equivoque ("my" or "your" left or right) interprets the answer to mean A.
"And now I have only to pronounce the proper magic spell. The trouble is to remember the right one. They are rather confusing, and if you happen to pronounce the wrong one, or even pronounce the right one the wrong way, the consequences may be serious. But I think I know this one pretty well. 'Peripatetico-paticocorum.' I fancy I have got it right. I don't know quite what it means myself, and nobody seems to be able to tell me. A Japanese gentleman told me he thought it was Spanish, but a Spaniard said he felt sure it was Welsh. Somebody else suggested that I
should 'ask a pleeceman.' I did ask a policeman, and he said, 'Go to-' somewhere I won't mention, but I don't think he meant it as a translation. My own idea is that it is a bit of Esperanto. Anyhow, it has the desired effect; for you see the beans have left the glass" (uncovering it and showing it empty), "and they have jumped into this tube, which is what I wanted them to do."

The beans are poured from the tube into the vacant portion, now to the front, of the mirror glass, with due care that the coil at bottom shall not be seen.
"But there's something wrong here. I must have made some little mistake in the pronunciation of the magic spell, for the paper seems to have disappeared as well as the beans. There is certainly no room for it in the tube. Here it is, though, or some of it."

The paper is unwound, and when it comes to an end the wand is passed through A and C (now bottomless) together, again proving (?) that the former which is always shown to the spectators could not possibly have contained the beans in any natural way. A moment or two later the inner tube can easily be got rid of behind the mass of paper ribbon.

## LOST AND FOUND

This trick may be worked either upon a black art table or black art mat. We will assume that the latter is used.

The requisites for this trick will in such case be as follows:

1. The mat. This may be a small circular one, a few inches in circumference without pocket.
2. A handkerchief, fourteen or fifteen inches square, of some gaudy pattern, carefully folded and placed in a square Japanese handkerchief box. ${ }^{1}$
3. A circular relvet patch as described ante, in the chapter dealing with novel applications of the Black Art principle.
4. A half-crown placed in a pochette, or otherwise so as to be readily get-at-able.

Presentation. Performer opens the box and takes out the handkerchief, which he carefully unfolds, handling it as if it were something of extraordinary value.
"I have here, ladies, a curio of an exceptionally curious kind. This is said to be the identical handkerchief which Othello gave to Desdemona, and which afterwards caused so much unpleasantness. No doubt you all know your Shakespeare, and will remember that Othello tells his wife, 'There's magic in the web of it.' And there is

[^8]magic in it still. Not so much as there was, I dare say, but still it retains a good many magical qualities. Among them is a curious talent for recovering lost property. For instance, I once had a dog. His name was Socrates, but he was generally called 'Socks.' In fact, he preferred it. He was a valuable dog, because he combined so many different breeds. He was partly pug, and partly greyhound, and partly dachshund, and partly chow, and partly bull-dog and partly terrier, and partiy of two or three other breeds that I can't for the moment remember. One day Socks went out to see a friend, and didn't come back again. I sat up all night for him with a stick, but he didn't come home till morning. In fact, he didn't come home even then. I thought I had lost him for good, and I was quite distressed aboutit.
"Just when I was beginning to get over the loss I had a further shock. My precious Desdemona handkerchief was missing. But the very next day I heard a barking outside, and there was my dog with the handkerchief tied round his neck and three other dogs with him. The handkerchief had recovered them all.
"You don't believe that little story. I thought you wouldn't. People never will believe anything a little bit out of the way. It is just the same with fish stories. I know a man who, when he was a boy, fishing in a pond with a maggot on a bent pin, caught a four-pound salmon. He didn't claim
any credit for doing it. He says himself it was just an accident, and might have happened to anybody. But he never can get anyone to believe him, and it has spoilt his character. He was naturally a truthful man, but being always disbelieved has made him reckless, and now, whenever he tells the story he sticks another half-pound on to the salmon. I believe it is a fifteen pounder now. ${ }^{1}$
"With regard to the handkerchief, however, I can easily prove to you that what I have stated is correct. I can't prove it quite in the same way, because even if any lady or gentleman present had lost a dog, it would take the handkerchief a day or two to find it, and you would get tired of waiting. So I must show you the virtues of the handkerchief in a simpler way.
"Will some gentleman oblige me with the loan of a half-crown, marked so that he can be sure of knowing it again?"

On receiving the coin the performer returns to his table, holding it on high so that it can be seen that there is no substitution, and lays it on the black art mat.
"Presently I propose to lose this coin, and get

[^9]the handkerchief to find it, but first you would like, no doubt, to have a look at the handkerchief itself. Notice the richness of the pattern. It is said to be after a design in the Alhambra. I don't mean the Alhambra you gentlemen go to, but the real Moorish one in Spain.

Leaving the handkerchief for the time being in the possession of a spectator he returns to the table, meanwhile palming the velvet patch, and the substituted half-crown, and ostensibly picks up the original, in reality rendering it invisible by laying the patch over it, and showing the substitute in its place, after the manner described at p. 19. He then advances to the company with the substitute coin and offers it to one or other of the spectators, remarking, "Take it, please, and pass it to one or other of your neighbours so that I shan't know where it is."

Under pretence of offering the coin, he passes it from the one hand to the other, and vanishes it by, say, the tourniquet, so that the person holding out a hand to receive it gets nothing, and says so.
"What do you say, Sir? You have not got it? But surely, I have just handed it to you. You are not joking? Then it must have fallen on the floor. Please look around you a bit." (Pretends to do so himself.) "Not there? Well, this is extraordinary." (To the lender of the coin.) "I am very sorry, Sir. Your money is lost in a way I did not anticipate. But after all, when I come to
think of it, it's of no consequence. The handkerchief will find it wherever it is, even if it has to follow it into somebody's pocket. By the way, where is the handkerchief?" He takes it from the person with whom it was left, and holding it by two of its corners, and showing both hands otherwise empty, lowers it down carefully over the black patch on table.
"And now to work the spell. 'Bismillah! Bechesm! Salaam Aleikoum!' You must excuse my speaking Arabic, but that is the only language the handkerchief understands. I see that the gentleman who lent me the half-crown is looking a little bit anxious. Cheer up, Sir, the handkerchief has never failed me yet. But we must give it time. Say, half a minute." (Looks at watch.) "This is curious. Half a minute gone. One minute, and nothing has happened. The handkerchief has made no move. Something must have gone wrong. But stay! If the handkerchief has not gone to the coin, perhaps the coin has gone to the handkerchief. Let us see!"

He lifts the handkerchief by the centre, picking up the black patch with it, and thereby disclosing the coin, which is handed back on the mat to the owner. Then carefully folding up the handkerchief, performer replaces it in its box, and in so doing regains possession of the velvet patch, to be got rid of at a convenient opportunity.

## THE RIDDLE OF THE PYRAMIDS

This, in good hands, will be found a very effective trick. I have the less hesitation in saying so, because the assertion is only to a very limited extent self-praise. The idea of the effect to be produced was my own, as also to a certain extent the method of producing it. I had even got so far as to devise, in anticipation, suitable patter. When, however, I proceeded to put my ideas into practice I found myself pulled up by unexpected obstacles.

The object to be attained, as will be seen by the sequel, was the instantaneous re-adjustment of the sundered parts of a small pyramid, and this I proposed to do by means of the pull of a thread, fine enough to be practically invisible. Now, to make segments of a pyramid not only draw together, but sit squarely one upon another, it is necessary to have forces operating simultaneously in two different directions, and the need for this caused difficulties which I found myself unable to cope with. Indeed, I had practically decided to content myself by producing a somewhat similar effect in a simpler way, as exemplified in the trick which I have called the Miracle of Mumbo Jumbo, which next follows.

As luck would have it, however, I mentioned my difficulties to my good friend, Mr. Holt Schooling, a gentleman whom I have more than once had occasion to refer to in my writings in connection
with some neat device. Mr. Schooling declared that the original idea was too good to be abandoned, and offered to try his hand at bringing it to a successful issue. I must frankly confess that I had no great hope of his success; but Mr. Schooling is a man of many talents. Apart from eminence in his own profession (that of actuary and statistician) he is not only an expert amateur conjurer,


Frg. 18
but an exceptionally skilful mechanic, and he possesses withal an unlimited capacity for taking pains. He used these qualities to such good purpose that I am enabled to include this striking effect among the contents of the present volume.

The principal item of apparatus is naturally the pyramid itself. which is of blackened wood as illustrated in Fig. 18. For the sake of lightness it
is of necessity a small affair, being four inches in height, about six across the base, and two across the top. It is divided into five horizontal slabs or segments, as indicated by the dotted lines. Midway on each side of each slab, at about half an inch distance from the upper edge, a minute hole is bored, parallel to the outer slope of the segment; exactness in this particular being an essential condition of success. Of the four holes in each slab, two only are actually used in the trick, the other two being added partly for the sake of uniformity, and partly to disguise the significance of the other pair. Each slab, save those at the top and bottom, is also perforated perpendicularly by three or four holes of considerable diameter, the object of these being merely to lessen the weight of the slab.

In preparing the pyramid for use in the trick, a piece of plaited silk fishing-line, stained black, and in length five to six feet, is passed by the aid of a needle upwards through the small hole in one side of the largest slab; then in the same way through the corresponding hole in the next, and so on till it comes out through the uppermost. Thence it is again passed downward through the next adjoining hole in each slab till it comes out at the bottom, when the ends are drawn level and tied in a knot.

The use of plaited silk fishing line for such purposes is one of Mr. Schooling's specialties, and is a "tip" to make a note of. Line of this kind is in
proportion to its thickness much stronger than ordinary silk thread, and, not being liable to untwist, its surface remains permanently hard and smooth, a great desideratum where it is important to minimise friction. Further, it.does not "kink" as a twisted thread is liable to do.

Two other items of apparatus are used, viz.:
(1) An electric torch in the shape of a wand, the light appearing at the end.


Fig. 19
Fig. 20
(2) A little knife or cutter specially designed by Mr. Schooling for use in this trick. This consists of a half-inch length of a safety-razor blade, set in a handle consisting of a piece of tin one inch square, folded in half, and then bent back to a right angle on each side, the blade projecting along the line of juncture as shown in Fig. 19. In use the cutter is held by what may be called its backbone between the first joints of the first and second fingers of the extended hand, as shown in Fig. 20. This cutter must be placed ready to hand upon the
table. It is so minute that there is no fear of its attracting attention. ${ }^{1}$

In presenting the trick the pyramid, with its sections duly threaded and placed one upon another, is brought in on a wooden board similar to an ordinary drawing-board, measuring twenty-four inches by sixteen, and like the pyramid itself, stained black. It is essential to the satisfactory working of the trick that the "base" section of the pyramid shall not shift when the thread is pulled. This is ensured by having two L shaped "stops" of thin wood glued or screwed to the board near the left hand corner nearest to the performer when in use.

The trick may be introduced as follows:
"I don't know whether any of you ladies and gentlemen are well up in Egyptology. I can't say I am, myself. I know a camel when I see one, but that is about as far as I have got. There is, however, one point about it which has always interested me very much. It is a point which has puzzled not only the Egyptologists, but all the other ologists; namely, how the pyramids were built. They consist, as no doubt you know, of enormous masses of stone; so large that the cleverest engineers of our day cannot tell us how they were placed one upon another. If you can imagine the lifting of the Royal Exchange in one lump and dumping it down on the top of the Bank of Eng-

[^10]land, you will have some idea of the sort of job the Egyptian builders had to tackle. ${ }^{1}$ Anyhow, the work was done, and as it is clear that it could not have been done by any known mechanical means, we are compelled to seek some other solution of the problem.
"I don't know whether any of you read novels. If you do, you must often have noticed the curious way in which fiction constantly anticipates fact. The novelist describes some utterly impossible thing, and a few years later some other fellow goes and does it. Jules Verne described a voyage under the sea long before the submarine was invented, and Mr. Wells wrote 'The War in the Air' while the aeroplane and the Zeppelin were still in their infancy. But there is one conception of the novelist which has not till now been made an accomplished fact. That is the force called 'Vril,' described by Lord Lytton in his novel, 'The Coming Race.' He describes Vril as a sort of hyper-electricity capable in the hands of those who know how to gather and use it, of producing all sorts of wonders, even to remoring mountains. Imprisoned in a wand and directed by a strong will, it will shrivel up an enemy or a wild beast as by a flash of lighting.
"I have always had an idea that this must have been the force used by the Egyptians to build the

[^11]pyramids. I have managed to collect a small quantity of an unknown force which answers very closely to Lord Lytton's description of Vril, and I have charged this wand with it. As regards killing things, I have only tested it so far on a black beetle. The experiment was a success. He was blown to atoms, all but one hind leg. I should like to try it on a tiger; if I could get one cheap. Does any gentleman present know of a secondhand tiger in a good strong cage going cheap? No? I was afraid you wouldn't. I am hoping however for a chance of trying it some night on a burglar. If a gentleman of the Bill Sykes persuasion should steal into my chamber at dead of night with felonious designs upon my Waterbury and my collarstud, he will be as a dead man. I shall just point this wand at him and say 'Die,' and he will be merely a little heap of ashes to be swept up by the housemaid in the morning.
"I can however give you an example of the power of my Vril as a motive force. I shall do so by using it to build or rather rebuild this little pyramid in your presence.
"This is a correct copy of the real thing. It takes to pieces, as you see. One, two, three, four, five!'

As he pronounces the last few words, the performer, standing behind his table, picks up the pyramid, and holding it aloft in his right hand draws away the base from the other sections, slid-
ing it along the thread, and "bedding"' it between the "stops" at the left hand bottom corner of the board. He then slides the other portions, one by one, along the thread in the same way, laying them in a row diagonally across the board. This will have taken up a considerable portion of the thread, but there will still be a loop some inches in length hanging down near the left hand corner of the table.
"Now please watch carefully. This wand, you will remember, has been carefully charged with my imitation Vril."

While speaking these last words the performer gets one finger of his left hand within the loop. He now turns on the light at the end of the wand, and with it makes a quick sweep from right to left over the severed parts of the pyramid, making at the same time a half-turn away from the table, and quickly drawing away the thread. If this is done neatly the severed parts of the pyramid run together one upon the other in a single instant.

It is probable that the parts may not sit exactly one upon another. Whether this is so or not, the performer makes believe to notice that it is so, as it gives him a needful opportunity. He remarks:
"The power was hardly strong enough, I see. There is a block here that needs a little straightening up." Having meanwhile picked up the little cutter between the fingers he bends over the table and squares up the pyramid as may (or may not)
be necessary, and under cover of so doing draws the blade across the thread where it crosses the top, thereby severing it, and then moving back a little to note the effect of his correction draws it away altogether. Shifting the restored pyramid to the centre of the board he brings all forward for examination. The severed thread is allowed to drop on the floor, to be picked up after the performance is over.

## THE MIRACLE OF MUMBO JUMBO

The items needed for the presentation of this trick are as follows:
(1) A miniature pagoda of quaint design. It consists of five circular sections, resting one upon another as illustrated in Fig. 21. The trick in effect consists of the automatic re-adjustment of these sections after being taken apart and shown lying apparently haphazard on a Japanese tray. For drawing-room use the pagoda is about six inches high and the same diameter across the base. For stage purposes it may be made a trifle larger.
(2) The tray. This, for use with a pagoda of the size above mentioned, should be not less than twenty inches long by ten or twelve wide, and fairly heavy, as being less liable to shift in use. It must have an upright rim; through one corner of which a minute hole is bored, countersunk and polished on each side of the opening in order to
diminish friction on a thread passing through it.
(3) An electric torch in the shape of a bottle; the light showing itself at the mouth.
(4) A black dress-hook, sewn point upwards to the lower edge of the performer's vest on the right


Fig. 21
or left side, as may best suit his own position in working the trick, just where back and front meet.

It will be found on examination of the pagoda that each of the parts of which it consists has a hole bored vertically through its centre. The topmost portion has in addition a pinhole passing horizon-
tally across it, about halfway down. Through this a black pin, bent at the head, passes as shown in Fig. 22. In preparation for the trick a piece about three feet long of black plaited silk line, with a small wire ring at one end, is passed by the aid of a needle through the hole in the tray from the outer side; thence upward through the various sections of the pagoda, beginning with the undermost, till


Fig. 22
it finally comes up through the head. After the needle has been drawn off, the end of the thread is formed into a loop, which is passed over the crosspin before mentioned. The thread is then drawn taut from below, the several segments of the pagoda resting fairly one upon another in the centre of the tray. The intermediate portion of the thread is drawn up till the little ring at the outer end comes close to the tray, and is laid upon it in
zigzag fashion so as prevent the possibility of its fouling at a critical moment.
'The introductory patter may run as follows:
"In the course of my travels in Central Africayou didn't know that I had been in Central Africa? Strange, how little the world knows of its greatest men! But no matter! When I was in Africa I chanced to come upon the place where the Golliwoggs live.
"It's a nice place-for those who like that sort of place, but most people would find it a little too warm. It is so warm there that the hens lay their eggs hard-boiled, and you dig up potatoes ready baked. It is too warm for anything but simple life,-the very simple life, particularly as regards clothing. The ordinary walking dress for a gentleman Golliwogg is a pair of braces. The king wears two pairs; except on state occasions, when he wears one of those short shirts instead. You know the kind I mean-all front. I think they call them 'dickeys.'
"The ladies are more dressy. They get the fashions from back numbers of the Daily Mail; kimonos and camisoles and corsets all in the latest style. They are made with green paint and put on with a shaving brusl. There is only one thing that bothers the court dressmakers. They can't make a crinoline."
[If desired to shorten the patter the fashion details may be omitted.]
"I mention these little matters in order to give you an idea of the place, in case any of you might like to take a week-end trip there. If you are old and tough, you might risk it. If you are young and tender, you had better not.
"The special point of interest is a curious pagoda in the centre of the village. It is seventy-five feet high and is supposed to be the habitation of Mumbo Jumbo; a sort of deputy devil, much respected in those parts. This little model is an exact copy of it. You can't call it pretty, but there is a very remarkable thing about it. When the king dies (which happens by accident about once a fortnight), the pagoda is pulled down, and if the new king is acceptable to Mumbo Jumbo (which depends upon the amount of his tip to the chief witch doctor) old Mum rebuilds it himself by magic. You don't see him do it. The pagoda just sits up and paws the air, so to speak If Mumbo does not approve, the proposed king gets a knock on the head with a cocoa-nut, and some more liberal Golliwogg is crowned instead.
"I naturally wanted to know how the miracle was worked; and I managed to buy the secret from one of the witch doctors. He sold it to me for a pair of sixpenny-half penny sock suspenders. He didn't wear socks, but that didn't matter. He put the suspenders on at once and strutted about, as proud as a dog with three tails.
"Now, I am going to tell you the secret. Scien-
tists tell us that the sun throws out three sorts of rays; light-rays, heat-rays, and force-rays. The artful witch doctors have found out a way of bottling off the force rays. They are mild at first, but when they get old in the bottle, so to speak, they become so strong that if you know how to do it you can lift the heaviest weights with them.
"I managed to get hold of a small bottle of the rays" (show bottle) "and I will show you, on a very small scale, how the thing is done.
"First, we will take the pagoda to pieces."
Standing behind the table, the performer moves the pagoda to the corner of the tray nearest his own left hand; so as to leave space for the different portions when separated. He then picks up all the parts save the base, holding them carefully together, and drawing away with them a length of the thread about equal to the diagonal of the tray. Passing the undermost section downwards along the thread, he lays it down beside the base, afterwards treating the other portions in the same way, the several portions finally resting on the tray somewhat as shown in Fig. 23.
If the length of the thread has been properly gauged (this is a matter to be determined by experiment beforehand), there should be some twelve or fourteen inches of "slack." Slipping the ring at the end over the little hook before mentioned, the performer moves a little away from the table, so as to draw this portion
of the thread all but taut, between his own body and the tray.
"And now to utilise our force rays." Holding up the bottle-shaped torch in his right hand, he turns its light onto the tray, at the same time edging away farther from the table and moving about behind it so as to cause a gradual pull upon the thread; the effect being that the severed parts of


Fia. 23
the pagoda mount gradually one upon another in due order. It is probable that they will not rest exactly one upon the other. In any case the performer affects to notice that they do not. Making a remark to that effect he steps close to the table to straighten them up, and under cover of so doing draws with the finger nail the pin in the uppermost portion, thereby releasing the thread. Stepping back again, as though the better to judge whether the pagoda is now "plumb," he thereby draws
away the line, and detaching the ring from the hook, lets it fall to the ground. This done, he returns to the table, and shifting the restored pagoda to the centre of the tray, brings all forward, inviting anyone who cares to do so, to satisfy himself that there has been "no deception."

## THE STORY OF THE ALKAHEST

The requirements for this trick are as follows:
(1) Two wands, exactly alike in appearance. One of them to be that just used in some previous trick or tricks (which we will call No. 2), and the other, prepared as to be presently explained, to be secretly substituted for it immediately before the presentation of the present trick. This can be easily done by the aid of a couple of pairs of cuphooks fixed behind the table or a chair after the manner described in "Later Magic," p. 1こ6; or the wands may be exchanged during journey to the table at an carly stage of the trick; by means of a pocket of suitable shape within the left breast of the coat. This is a matter as to which the performer will please himself, but the exhibition in the first instance of an obviously umprepared wand is essential to the artistic finish of the trick. ${ }^{1}$

[^12](2) Two pieces of ribbon, three-quarters to one inch wide, alike in colour. Of these, one piece is to be wound round the end of wand No. 2 at about three inches from the end, and secured by a rubber ring, of the solid kind used for holding together the ribs of an umbrella. This wand, after being "switched" for the unprepared one, must be so placed upon the table that the end on which the ribbon is wound shall be masked from view by the second piece of ribbon, lying in a loose heap in front of it.
(3) A stoppered bottle of clear glass, preferably of some ornamental or quaint design. This bears a label, of discoloured and time-worn appearance, with the letter $H R$ written on it in crabbed but distinct characters, and is about half-filled with Eau de Cologne or lavender water, to which a few grains of cochineal have been added, giving it a rich ruby colour. So far as the working of the trick is concerned plain water might be used, but a coloured and scented liquid is preferable for the sake of effect.
(4) A spare rubber ring, of the kind above described, placed in left-hand vest-pocket.
fessedly picked up again, but as a matter of fact is pushed forward by the tips of the fingers, and takes the place of the prepared wand, which is picked up in its stead.

A pack of cards may be "changed" for another after a similar fashion, the first finger and thumb picking up the faked pack, while the unprepared pack is pushed forward by the second and third fingers into the place it occupied.

The trick may be introduced as follows:
"For the next surprise I hare to show you we are indebted to the ancient alchemists. People regard them as back numbers nowadays, because they didn't know anything about aeroplanes, or appendicitis, or income tax and such-like up-todate luxuries; but they had a good many useful little secrets of their own. One of them was the recipe for what was called the Alkahest, a liquid which immediately dissolved anything it touched; from a gold watch to a set of fire-irons. The secret of making it has long been lost, and all that still exists of the liquid itself I have here in this bottle."

The bottle is here brought forward and offered for inspection.
"Pretty colour, isn't it? And it has a rery delightful perfume." (Takes out stopper.) "You are welcome to smell it but I don't advise you to taste it. If you did you would probably never taste anything again. I want you to notice, by the way, those two letters $H R$ on the label. There is a dead secret attached to those letters. They mean something, of course; but nobody knows what it is."

The bottle is replaced on the table.
"This bottle came into my hands by inheritance. An ancestor of mine, in the reign of James the First, was an alchemist in a small way. He is reputed to have made a handsome income by sell-
ing ladies something to put in their husbands' tea. History doesn't say what. Let us hope it was only sugar. Well, this old gentleman managed to get hold of the recipe for making the Alkahest. Whether he found it out himself, or whether he cribbed it from the cookery-book of some other alchemist, I can't say. Anyhow, he got it; and he made up some of the stuff and put it in that bottle.
"When he was just going to be burnt as a wizard, which was the regular thing with scientific men in those days, he handed the bottle to his eldest son, my great-great-grandfather seventeen times removed, saying, 'Take it, my son, and may it do you more good than it has done me.'
"My great-great-grandfather took the bottle; but he had no idea what it contained. He was just going to ask his father what the letters on it meant, but just at that moment the old gentleman flared up, and it was too late. For the rest of his life my great-great-grandfather puzzled his head as to what those two letters $H R$ stood for, but all he could think of was 'horse-radish,' and he knew it couldn't be that.
"Since that the bottle has been handed down in our family for sixteen generations, till at last it came to the hands of my Uncle James, and he puzzled over those letters like the rest. Uncle James was a bit of a 'nut,' and prided himself on his fine head of hair, but in course of time he found he was
getting a bit thin on the top, and it worried him. One day, thinking over the mysterious letters, an idea struck him. 'H R'! he explaimed, 'H R ! why "Hair Restorer" of course, not a doubt of it! I'll try it this very night.' He did. He rubbed it in, and went to sleep quite happy, but when he tried to brush his hair in the morning there wasn't any left to brush. The Alkahest had taken it all off, and left him as bald as a baby.
"He went to bed again, and ordered a wig, but before it could be sent home he caught such a cold in his head that he died. Just-sneezed-him-self-away."
(The last words to be spoken slowly and sadly.)
"I notice that some of you ladies are weeping. It is an affecting story, no doubt, and I used to shed a tear over it myself. But after all, you didn't know my Uncle James. Neither did I, for the matter of that, and if we had known him we might not have liked him. So we won't stop to grieve about him. ${ }^{1}$
"One of the most striking experiments with the Alkahest is the dissolving of a paving stone, particularly if you lay a bunch of violets on it and dissolve them both together, when you get a scuttleful of best Violet Powder. Unfortunately I haven't a paving stone handy, and I don't suppose any gentleman present is likely to have one about

[^13]him. No? I feared not! Another pretty experiment is the dissolving of a diamond ring, but I have no diamond rings myself, and I find that if I borrow other people's and don't return them I get myself disliked. So I must try to show the power of the Alkahest in a less expensive way."

Returning to his table, the performer with his right hand picks up the prepared wand (holding it so as to conceal the ribbon coiled upon it), and with the left hand the mass of loose ribbon.
"I have here a piece of ribbon: just ordinary ribbon. Will some lady oblige me by tying a knot in it, about three inches from the end. Thank you! Now will some other lady tie another knot about three inches from the first one."

This is repeated till five or six knots have been tied, taking up about half the ribbon.
"I am not sure how many knots have been tied. Please count them for me as I roll the ribbon round my wand."

So saying, he winds the ribbon, beginning with the knotted end, on to the free portion of the wand, counting the knots as he does so, and continuing the winding till the whole has been taken up. In so doing he takes care to cover up the knots, and to make the appearance of the rolled ribbon correspond as nearly as possible with the hidden coil upon the other end, finally securing it with the rubber ring from his pocket.

We will suppose that five knots are found to
have been tied. The performer returns to the table to fetch the bottle; and during the transit passes the wand to the opposite hand, in so doing drawing off the knotted ribbon (to be dropped a moment later into the profonde), and exposes the opposite end. He remores stopper from bottle, leaving it on the table.
' Now comes the most critical part of the operation. I am going by means of the Alkahest to dissolve these knots. How many did we say there were? Five? Then I must use five drops and no more. If I were to overdo it in the smallest degree the consequences would be serious. I should destroy the ribbon altogether, and in these hard times ribbon is ribbon, even if it is only sixthree a vard."

He brings forward the bottle, and with great pretence of accuracy lets fall on the ribbon the suggested number of drops. Then slipping off the rubber ring he offers the end of the ribbon to some member of the company to unwind, when the knots are naturally found to have disappeared.
"The Alkahest retains its virtue, you see, even after so many years. Every knot is completely dissolved. I will conclude by asking you an impromptu riddle. Just one of those bright thoughts that strike me sometimes when I least expect it-
"When is a knot not a knot?"
"When it's not there.

## THE ORACLE OF MEMPHIS

This is of the nature of a magical toy rather than a conjuring trick proper, but its exhibition may form a pleasant interlude in the course of a social entertainment. I invented it at an early


Fig. 24
stage of my magical career, and exhibited it on various occasions for the amusement of friends, but made no further use of it. The apparatus has been put aside, and has been out of sight, out of mind, for many years past. Coming across it accidentally some short time ago, I was agreeably surprised to find that it would still answer questions as promptly, and doubtless as truthfully, as of yore.

The general appearance of the apparatus. which is eight inches high by seven in outside diameter, is as depicted in Fig. 24 . It consists of a circular mahogany stand or base, resting on three small feet, and surmounted by a glass dome $b$. This last is in fact a bell-glass. as used by gardeners. and has at top the usual knob, whereby to lift it. To this is attached a short loop of narrow ribbon. The glass dome does not rest directly on the stand, its lower edge being encased in a mahogany mount. From the centre of the stand rises a rertical pin, a quarter of an inch in height. serving as pirot for a metal pointer (Fig. 2.5). which. br means of a little cup, or socket. at its centre. can be lifted on and off, and revolres freely upon it. after the manner of a compass. A further item of the apparatus is a reversible cardboard dial, whose two sides. front and back, are depicted in Figs. 26 and $\cong-\overline{2}$. It will be seen that the circumference of this dial is divided on the one side (Fig. -6) into four equal sections, each bearing a pip of one of the four suits. The other side (Fig. ${ }^{2}$ ) is divided into eight sections. marked with the numerals. from seren to ten inclusire, and the letters $\mathrm{A}, \mathrm{K}$. Q. and J, answering to Ace, King. Queen and Jack.

With the Oracle is used a set of eight questions. and a piquet pack of cards. on the backs of which are written or printed thirtr-two answers appropriate to such questions, one of each suit to each question. The person consulting the Oracle har-
ing selected the question he or she desires to have answered, the dial is laid on the stand with the "suit" or Fig. 26 side uppermost, and the pointer is placed in position on its pivot. The querist is invited to breathe into the glass, which is then lowered on to the stand. The pointer begins to move, and after a moment or two of indecision,


Ftg. 26
Fig. 25
comes to rest opposite one or other of the four suitpips; we will suppose, for the sake of illustration, the diamond. The glass is then lifted off, the dial reversed, the pointer replaced, and the glass once more lowered on to the stand. Again the pointer moves, and stops this time, we will say, at the number "seven." The seven of diamonds is sought
for in the pack, and is found to bear a more or less appropriate answer to the question asked.

The movements of the pointer are governed by the fact that, imbedded in the mahogany mount suriounding the base of the bell glass, is a piece of thick steel wire, strongly magnetised, and extending half way round the circle. The pointer, though so coloured as to have the appearance of brass, is in reality a magnetic steel needle, and therefore when resting on the pirot and covered by the glass, will automatically more round till it comes to rest between the tro magnetic poles formed to the opposite ends of the hidden wire. The operator can therefore, by placing the glass cover accordingly, cause the indicator to stop at any part of the dial that he pleases.

It remains to be explained what guides him in the manipulation of the glass, so as to cause the needle to stop at the point he desires. It will be remembered that, attached to the knob at the top of the glass, is a loop of ribbon, serving to suspend the glass in use from the forefinger. as shown in Fig. 28. But the loop has in truth a much more important function than this. Before the loop is formed, the ribbon is tied tightly round the neck of the knob, previously waxed to prevent its slipping round, and the knot is so placed that it shall exactly correspond with that pole of the magnet to which the point of the needle is intended to be in use attracted. This done, a loop is formed with
the two ends of the ribbon, and so arranged in point of length that when the glass is suspended from the forefinger, as in the diagram, the thumb and second finger of the operator shall be just right for moving it round in either direction, the little knot guiding him by feel to bring it to the desired point.


Fig. 28

The exhibitor is not limited to any particular set of questions and answers. At the cost of a fresh pack of cards and a little ingenuity, he can
please himself in this particular. The selection of suitable questions and answers is however a somewhat delicate matter. The answers must on the one hand be smart enough to afford amusement to the company generally; and on the other hand must not be so pungent as to be likely to cause offence to a person putting the question.

The questions and answers I devised for my own use ran somewhat as follows:

1. What does my husband (or wife, as the case may be) most think about?

## Answers

Seven of Diamonds. Yourself.
" Hearts. Money.
" Spades. Dinnertime.
" Clubs. Golf.
2. Shall I live to grow old?

Eight of Diamonds. Yes, if you don't worry about it. " Hearts. A well-spent youth will be fol-
lowed by a happy old age.
Spades. As old as you care to be.
" Clubs. Yes, old, and fat.
3. What is my chief fault?

| Nine of | Diamonds. | You haven't any. |
| :---: | :--- | :--- |
| $" ،$ | Hearts. | Excessive modesty. |
| $" 6$ | Spades. | Flirting. |
| $" 6$ | Clubs. | Swank. |

4. Shall I have what I am wishing for?

Ten of Diamonds. Yes, if you deserve it.
" Hearts. If you go the right way to get it.
Ten of Spades. Not likely. " Clubs. It is like your cheek to wish for it.
5. What am I thinking about at this moment?

| Jack of | Diamonds. | A new hat. |
| :---: | :--- | :--- |
| "، | Hearts. | Servants. |
| "، | Spades. | You wouldn't like me to tell. |
| "" | Clubs. | That it is a long time between <br>  |
|  | drinks. |  |

6. What shall I do to get health?

Queen of Diamonds. Don't think about it. " Hearts. Keep smiling. " Spades. Take Podger's Purple Pills. " Clubs. Eat less.
7. How old am I?

8. What shall I be this time next year?


It will be found on comparing them that the answers are arranged on a regular system, those on the red cards being of a more or less complimentary nature, or otherwise favourable; the black suits less so, particularly the clubs, which are
rather the reverse, and are intended to be used as replies to gentlemen only. Bearing this arrangement in mind, it is a comparatively easy matter to suit the answer to the querist.

The questions must be memorised in proper order, and it is desirable to do the same with the answers also, though there should be no difficulty, remembering the principle of arrangement, in giving a fairly appropriate answer, even though the memory be for the moment at fault as to its exact terms. To avoid the necessity of giving the same answer more than once, it is well to make a rule that the same question shall not be asked more than three times.

The Oracle may be introduced as follows:
"Allow me to introduce to your notice a curio of an exceptionally interesting kind. This elegant little affair is said to have been the private Oracle of Rameses the Second, a gentleman who flourished in Egypt about four thousand years ago. I can't be sure to a year or two, because it was before my time, but I believe that is about right. People sometimes express surprise that, being so ancient, the Oracle should be in such good condition, but that is accounted for by its having been preserved in the same case as Rammy's mummy. I don't mean his mamma, but the gentleman himself, in the cold storage of the period. The story may or may not be true. I can't take any responsibility for it. Others declare that the Oracle was the fav-
ourite plaything of Helen of Troy. Historians do tell such tarradiddles that one doesn't know what to believe.
"The powers of the Oracle are limited, for it will only answer eight questions, and in its own way, but its answers are quite trustworthy-well, perhaps not quite. Let us say as trustworthy as those of Bond Street fortune-tellers at a guinea a guess. Who will be the first to test its veracity?
"I should mention, by the way, that, as each answer exhausts a certain amount of power, the same question must not be asked more than three times. You would like to consult the Oracle, Madam? Then please select one of the questions on this card, and read it out for the information of the Company.
"You wish to know" (repeating question). "Good. The answer to your question will be found on one or other of the cards in this pack, and the Oracle will tell us which one to look for. First, however, I must ask you to breathe into this glass. That supplies the missing link, so to speak, and makes it a sort of personal affair between you and the Oracle." (This is done.)
"Thank you. Now I shall place the glass on its stand, and this little pointer" (holding it up and placing it on its pivot) will reveal the correct answer, first indicating the suit among which the answer is to be found. You may notice that it wobbles a bit at first. That is because it is think-
ing over the question. Now it has come to rest, and it says the answer will be found in the"(name suit.) "And now to find out which is the right card of that suit. I take off the glass and turn the dial over. Please concentrate your mind on your question. I put the glass and the pointer on again. Again the pointer thinks it over. and finally decides as you see, for the --" (naming number of card.) "Now all we have to do is to look out that card" (does so) "and here we have the answer to your question."

Before inviting a fresh querist to breathe into the glass, it is well to mipe it out carefully with a silk pocket handkerchief, professedly to dispel the personal magnetism of the last enquirer, any remains of which, left within the glass. might imperil the correctness of the anticipated answer.

## THE MYSTERY OF MAHONET ${ }^{1}$

The reader is probably familiar with the trick known as "The Silver Tube and Ball." If not, it may be stated that the "tube" is of metal, nickelled, and about eight inches long by one and a half in diameter. With it is used an ebony ball, which is made to pass into and out of the tube in a very surprising way.

The secret lies partly in the fact that half way

[^14]down, the internal diameter of the tube is very slightly narrowed, forming a sort of "choke," so that a ball dropped into it at the upper end does not fall right through, as one would naturally expect, but stops at that point, wedging itself lightly, so that the tube can be reversed without any fear of the ball falling out, though it can be instantly driven out by bringing down the tube smartly on the table, or by very slight pressure behind it.

The other part of the secret lies in the fact that two balls are in reality used, the existence of the second being of course unknown to the spectator. The tube being loaded as above mentioned, i.e. having the one ball wedged in it just below the choke, if the duplicate is dropped in from above it will apparently fall through, though as a matter of fact this ball comes to a standstill in the tube above the choke, while the other is driven out at the bottom. The secret use of this second ball enables the performer to produce sundry surprising results in the way of appearances and disappearances.

The possibilities of the trick in this form are however speedily exhausted, and it has a serious drawback in the fact that it is necessary to invert the tube afresh before each production, as it is obvious that a ball contained in it must be brought below the choke before it can be produced. I had at one time rather a fancy for the trick, but it seemed to me that it was capable of a good deal of
improvement, and after some cogitation I succeeded in producing a new trick on somewhat similar lines; but free from the defect mentioned above and capable withal of producing a far wider variety of effects.

I use two tubes of stiff cardboard, each about four inches long by one and a half in diameter. One of these is just a plain tube with no speciality


Fig. 29
about it. The other has a piece of fine wire crossing it midway from side to side, and taking the form of a halfhoop, as shown in Fig. 29, the ends serving as pivots on which it moves freely. On the outside, one of its ends is turned down vertically, forming a tiny switch or handle. The normal tendency of the halfhoop is to hang downward across the tube (thereby closing it to the passage of a ball) but a touch of the finger, moving the little
switch to right or left, raises the loop to a horizontal position against one or other of the sides of the tube, when it no longer offers any obstacle to the passing of the ball. The wire used is so thin that with the halfhoop lying against its side a spectator may safely be allowed to look through the tube even at a very short distance, without fear of his perceiving the presence of the wire.

The requirements for the trick, all told, are as follows:
(1) The wand.
(2) The plain tube.
(3) The trick tube.
(4) Two white balls.
(5) A red ball.
(6) A lighted candle.
(7) A small red silk handkerchief.

One of the white balls must be vested or otherwise so placed as to be ready for production from the wand. The second white ball and the red ball are stowed in the pochettes, one on each side. The faked tube may be vested and exchanged for the plain one during the journey back to the table after the dummy has been tendered for inspection; the latter being dropped into the profonde. These however are matters which the expert will arrange after his own fashion. If the performer, not being an expert, doubts his ability to
"change" the tubes neatly during the transit, he may suppress the plain tube altogether and commence at once with the exhibition of the faked tube from the platform, but the omission makes the trick less convincing.

We will suppose that the performer goes for the maximum effect and advances offering the dummy tube for inspection. The patter I suggest for the trick in this form runs as follows:
"I have here, ladies and gentlemen, a hollow tube. It is not uncommon for tubes to be hollow, but this one is, if anything, even hollower than usual. I should like some lady or gentleman to examine it carefully and testify that it is just a plain ordinary tube with absolutely no deception of any sort about it. If it was not so, you may be sure I should hardly venture to let you examine it. You can see through it, hear through it, or blow through it. You are satisfied? Then I will show you a curious little experiment with it."

During the return to the table the dummy is exchanged for the trick tube.
"I call the experiment I am about to show you 'The Mystery of Mahomet.' I gave it that name because it was Mahomet who suggested the idea to me. I don't mean personally. I didn't know him. In point of fact he did not give me the idea till after he had been dead for some years. This sounds peculiar, but I will explain.
"When Mahomet died he wasn't buried like
other people. His coffin was placed in a mosque, where it hangs in the air like a captive balloon, about twenty feet up, resting on nothing at all. I am not certain as to the exact height from the ground, but that is what the Moslems say, and they would hardly tell a story about a little thing like that. It has always been a mystery what keeps the prophet up aloft. Some say it is done by mes-


Fig. 30
merism, some say by magnetism, and one old gentleman declared it was done by mormonism. No doubt, when you come to think of it Mahomet was a bit of a Mormon. But they are all wide of the mark. As a matter of fact the coffin rests on a slab of compressed air. It's quite simple, when you know it. I haven't a coffin handy, but by means of this little tube I can show you the effect of the same principle on a smaller scale.
"As some of you have not had the opportunity of personally examining the tube I should like to prove to you in the first place that it is really what it appears to be, a simple cardboard cylinder, open from end to end, and as free from deception as I am myself.
"Proof 1." (Wand dropped through tube on to table.)
"Proof 2." (Tube held in front of candle showing flame through it.")
"Proof 3." (Tube dropped over candle as in Fig. 30, or spun on wand, held horizontally as in


Fig. 31

Fig. 31; the halfhoop in each case being made to lie against the side of the tube.)
"I have here a little ball, of such a size that it passes easily through the tube." ${ }^{1}$ The ball is allowed to fall through, from the one hand to the other.
Now I will place the tube upright on the

[^15]table and drop the ball in once more. Where is it now? On the table, you say. Quite right: here it is." (Lift tube, closing it, and placing it on end beside ball.) "But now I take a few handfuls of air and press them well down into the tube" (makes believe to do so), "and I drop the ball in again. This time you see it does not fall through. As a matter of fact it has stopped halfway, resting on the compressed air in the tube." (Lift tube, showing that the ball has not passed through. After replacing the tube switch the wire loop to the horizontal position, allowing the ball to drop inside the tube.) "I think there can be no doubt that this is the way Mr. Home, the medium, managed to float about with his head in the air and his feet on the mantelpiece. All that was needed was a few pints of compressed air in his tail-pockets. It's quite simple, when you know how it's done.
"Of course, as the tube is open at the top, the effect doesn't last very long. The compressed air gradually expands again and becomes too thin to support the ball any longer. I dare say by this time it has done so." (Lift tube, exposing ball, and re-closing tube). "Yes, here it is."
"I can keep the air from escaping to a certain extent, because I happen to have a very strong won't. A strong will is a good thing to have, but sometimes a strong won't is even more useful. Once again I will fill the tube with compressed air." (Make believe to do so, then pick up the closed
tube.) "I drop the ball in again, and this time it will remain suspended till I permit the compressed air to escape." (Pick up tube, holding it rertically a few inches above the table.) "Sar when you would like the ball to fall. Now? Good! I withdraw my strong won't and the ball falls at once." (Switch loop, allowing it to do so, then pass tube, closing it, to opposite hand and load into it duplicate ball at top; then replacing tube on table.)
"Now, by way of variety. we will try compressing the ball instead of the air." (Pick up ball left on table and make believe to transfer it to the opposite hand. Then, with the left hand emptr, make pretence of crushing it into the hand.) "The ball is now resolved into its component atoms. You didn't see them go? No, of course rou didn't. For the time being they are dematerialised : but the compressed air in the tube will soon solidify them again." (Lift tube, keeping ball suspended.) "It has not got solid yet, but we shall not have long to wait." (After a few moments again lift tube. opening it and allowing ball to pass through.) "Here is the ball, now as solid as before."
Transfer tube closed to opposite hand and in so doing load in red ball at top. In replacing tube on table open and close it again, so that the ball shall fall, but shall rest within the tube on the table.
"Now I will show you another curious effect. A ball which has been dematerialised in that way
becomes very sensitive to colour. I will just give the ball a rub with this red silk handkerchief and drop it into the tube again." Drop in white ball after rubbing, keeping tube closed; then raise it and show red ball at bottom.
"Here it is again, you see, but it has taken the colour of the handkerchief and is now a rosy red, a sort of maiden's blush; the blush of a very shy maiden. Unfortunately maiden's blush is not a fast colour, unless it's the wrong kind; the kind that's rubbed in with a powder puff. This kind soon gets pale again. I rub the ball again, this time with a white handkerchief, and again drop it into the tube."

Drop in red ball, tube closed, lift and show white ball, under cover of its appearance transferring tube to opposite hand and allowing red ball to run back into palm to be got rid of a moment later.
"I think I heard a lady say, 'Where is the red ball?' This is the red ball, at least it was the red ball a moment ago. There is no other, for, as you see, the tube is empty."

Again drop tube over candle as in Fig. 30. Pass ball from hand to hand and finally make believe to swallow it, meanwhile dropping it into the profonde.
"After being treated like this the ball becomes so volatile that I used to be always losing it. But I never lose it now. I just swallow it and then I
know just where it is when I want it. It saves a lot of trouble."

## THE BEWILDERING BLOCKS

The blocks which give its title to this trick are inch-square wooden cubes, three in number, as illustrated in Fig. 32. Each is coloured black on two of its opposite sides; these in use being made top and bottom. The four remaining sides are in the case of one block red, of another white, and of a third blue. The only other item of apparatus known to the spectators is a square cardboard tube, as depicted in Fig. 33. This is about five inches long, and of such dimensions laterally as to let either block slide by its own weight easily through it, but no more. All four items may be freely submitted to inspection, for in this case appearances are not deceitful. Both the blocks and the tube are no more and no less than they seem to be.

In exhibiting the trick, the tube is placed upright on the table, and the three blocks are dropped into it one after another, the company being requested to note particularly the order in which they are inserted, which we will suppose to be in the first instance blue, then white, and lastly red, as shown without the tube in Fig. 32. It is clear that, once inserted, they cannot by any natural means alter their relative positions, but, strange to say, when they are again uncovered, the red block just
inserted at the top is found to have passed to the bottom, the other two moving up accordingly.

This surprising effect is produced by the secret introduction into the tube of a fourth block of which the spectators know nothing. This, which


Fig. 32


Fig. 33


Fig. 34
we will call the "trick" block, is, like the rest, coloured black at the top and bottom; but of the remaining four sides two, contiguous to each other, are red, and the other two blue.

When the tube is handed back to the performer
after inspection, before placing it on the table he secretly introduces the trick block into its lower end, privately noting against which sides of the tube the two red faces will lie, and taking care in placing the tube upon the table that the angle formed by these two sides shall be to the front. The other three blocks are then, in accordance with the patter, dropped in from above, in the order shown in Fig. 32, resting, unknown to the spectators, on top of the trick block. When the performer lifts off the tube, which he does grasping it diagonally between thumb and finger at about an inch from the top, he does so with gentle pressure, thereby holding back the uppermost block within the tube, and exposing the two others with the trick block at the bottom, as indicated by Fig. 34.

I gave a description of this trick in the Magician of February, 1914. The patter for its exhibition was based on a popular nursery legend, and as this mode of presentation won general approval from the juveniles I cannot do better than repeat it practically as there given. The needful working instructions will be found interspersed with the patter.
"What I am going to show you now is not a trick, or, if you can call it a trick, it is one that works itself, for you will see for yourselves that I have really nothing to do with it. It is just an illustration of the force of bad example.
"No doubt you have all heard of a young gentle-
man called Fidgety Phil, There is a little poem about him. It says:

'Fidgety Phil Couldn't keep still, Made his mother and father ill.'

"There are a lot more verses but I am sorry to say I don't know them. However, these few lines are enough to show you what sort of a boy Fidgety Phil was. He was the kind of boy that wherever he is, he wants to be somewhere else. When he was standing up he wanted to sit down, and when he was sitting down he wriggled about on his chair till he was allowed to stand up again.
"These little blocks are all that are left of a box of bricks which are said to have belonged to Fidgety Phil and they show what even a box of bricks may come to if a bad example is constantly set before them. These three little bricks have got to be just as fidgety as Phil was himself. Anyhow, that is the only way in which I can account for their queer behaviour.
"Please have a good look at them, and see if you can discover anything peculiar about them. I can't, myself." (The blocks are handed for examination.) "They seem to me to be just ordinary bits of coloured wood, and this square tube is believed to have been a chimney pot belonging to the same set. I want you to notice particularly that the bricks are just the right size to fit closely
in the chimney. Ther go in quite easily ; but when they are once inside they can't turn round, or turn over, or change places. But the curious thing is that though they can't they do, as you will see presently.
"I place the chimney-pot here on the table, where you can see all round it, and I drop the three bricks into it one by one. Notice particularly the order in which I put them in. First, the blue. You heard it go down. Next, the white, and now, the red. Don't forget. Blue at the bottom, white in the middle, and red at the top.
"Now, without my saying or doing anything, they will at once begin to shift about. They can't keep still for more than a few seconds. When I lift off the chimney pot, you will find that they have changed places." (It is lifted accordingly, performer holding back the uppermost block within it by gentle pressure on opposite angles of the tube, and exhibiting only the three lower blocks now as in Fig. 34.)
"There, as I told you, like. Fidgety Phil, they couldn't keep still. The white brick has climbed to the top, the red one has gone down to the bottom, and the blue one is now in the middle.
"We will try again. I will put the bricks in in just the same order, to make it easier for you to remember them."

Performer has meanwhile allowed the red block, left in the upper part of the tube, to sink to the
bottom, checked by the third finger, and replaces tube upright on table.
"As before, I drop in first the blue, then the white, then the red." (This last being the trick block, care must be taken to keep its red sides well to the front.)
"Again I left off the chimney pot, and again you see, the bricks have changed places. White has come to the top, and red has gone to the bottom again."

The trick block, which this time remained at the top, is now allowed to slide down to the bottom. The tube is again placed on the table, but so turned that the blue sides of the block within it are brought to the front.
"I can't tell you why the bricks behave in this way, but you can see for yourselves that $I$ have nothing to do with it. We will try it once more, and for a change I will put the red block in first, then the white and then the blue. That order will be easy to remember. Red, white and blue reckoning from the bottom upwards. Again I remove the cover. The same thing has happened again, but with a little difference. White has come to the top again, but blue has this time gone to the bottom."

While attention is drawn to the new order of the blocks, the performer allows the ordinary blue one, now left in the tube, to slide out into his hand, and in picking up the others secretly substitutes
this for the trick block, which is now at the bottom of the tube.
"Once more, ladies and gentlemen, here is the chimney pot, and here are the three bricks, for inspection by any one who cares to look at them. Perhaps some of you may be able to account for their remarkable behariour. It's a puzzle to me; but I never was good at guessing. My own idea is that they are haunted by the ghost of Fidgety Phil. If not, I give it up."

## AN "OD" FORCE

To avoid misconception, it may be well to state at once that the peculiar spelling of the word "od" in the above title is not a printer's error. The explanation will be found in the patter, which is founded on a discovery claimed to have been made by a scientist at one time of world-wide renown, and the responsibility for so spelling the word rests with him. For programme purposes the reader is at liberty to re-name the trick according to his own fancy. "Mysterious Motion," or "Mored by Magic" would fairly represent the effect produced. which consists in causing a borrowed coin to move automatically at the will of the operator, in rarious directions.

The requirements for the trick are as follows:
(1) The "tramway" whereon the coin is to be made to travel. This consists of a slab of wood
thirteen inches long by four wide, and threeeighths of an inch thick and covered as to its upper side with fine black cloth. To the cloth-covered side of this is attached, by means of a screw at each corner, a parallelogram of brass or copper wire enclosing a space two inches wide. The four screws, which are likewise of brass, and which are


Fig. 35
of the round-headed kind, are within the parallelogram and serve to keep the wire extended. Midway at each end is another screw, driven in outside the wire, in such manner as to make all taut. These last two screws, for a reason connected with the working of the trick, stand up a shade higher than the other four, but the difference is not great enough tọ be noticeablẹ. See Fig. 35.
(2) A special "pull" carried on the person of the performer. This consists of a fine black thread, to one end of which is attached a weight travelling up and down the trouser leg, after the manner described (in connection with a self-suspending wand) at page 111 of "Later Magic." In the present case, however, the weight is much smaller, being in fact just large enough to rather more than counterbalance the coin used in the trick, plus the friction to be orercome br the thread in the working of the trick. The degree of such friction is an uncertain quantity, as it will largely depend on the nature of the operator's underwear and its closeness to his own body. The precise weight most effective must be ascertained by previous experiment, and regulated accordingly.

It will be found convenient to use by way of weight a glass tube, closed at the bottom like a test-tube and loaded with buckshot, more or less in quantity according to the weight required. The mouth of the tube is closed by a cork, through which one end of the thread is passed, and secured on the under side by a knot and a spot of gum. When the minimum weight that will effectually serve the desired purpose has been ascertained, any vacant space above the leaden pellets should be filled with cotton wool (to prevent rattling) and the cork should then be cemented into the tube. If preferred, the wool may be interspersed among the buckshot.

The opposite end of the thread, which will be somewhere about thirty inches in length (this again being a point to be determined by experiment), is passed through the curled end of a good-sized safety pin. This, for use in the trick, is attached to the inside of the performer's vest, just within the lowest part of the opening. To the free-end of the thread, after passing through the loop of the pin, is attached a disc of copper or zinc, threequarters of an inch in diameter, against which, on one side, is pressed and flattened out a pellet of conjurer's wax, in good adhesive condition. If the length of the thread has been duly regulated, the little dise will rest normally just within the vest, but can be drawn out the extent of a couple of feet or so, returning swiftly to its hiding place the moment it is released.
(3) A glass ball-professedly crystal.
(4) An ordinary match-box, empty.

Instructions for the working of the trick will be most conveniently given step by step with the patter, which may run as follows:
"In the early days of Queen Victoria's reign, when the oldest of us here present were good little boys or girls, and the rest were not born or thought of, there lived a celebrated scientific gentleman, called the Baron von Reichenbach. I am sorry to say he was a German, but he couldn't help it. As his father and mother were Germans, he had to be one too. It shows how careful children ought to be
in the choice of their parents. He invented a lot of useful things, among them creosote and paraffin. Neither of them smells very nice, but they don't trouble about that in Germany.
"Besides being a great chemist, Von Thingany dabbled in what are called the occult sciences, and he claimed to have discovered a new force (a sort of magnetism, only different) and which, he declared, pervaded every thing in nature. especially crystal. Directed by a strong will, like his own, or mine, it would do all sorts of wonderful things. It seemed to me that such a force would come in very handy for magical purposes, and I set to work to invent it orer again, and I have at any rate produced something very like it. The Baron called his force 'odd,' but he spelt it 'od,' which is odd too. You must judge for yourselves whether my force is the same as his, and you can spell it which way you like.
"I have only been able so far to work up a very small amount of the force, say about six-mousepower, so it won't turn tables, or lift pianos. I can only get it, so far, to move a small weight like a florin or a half-dollar, and that only for a very short distance. For greater conveniences I have made this little tramway for the coin to perform upon. These wires which you see are not for it to travel on, but merely to get more equal distribution of the force. There is nothing out of the way about
it, nor with this ball, except that it is crystal. Examine both as much as you please."

The two articles are accordingly offered for inspection. The performer takes back the tramway in the left hand, holding it by one end in such manner that it is gripped in the fork of the thumb, leaving the thumb itself comparatively free. Taking back the ball with the right hand and remarking "Now to develop the force," he rubs it on his left coat-sleeve, and strokes the surface of the tramway two or three times with it.
"Having now established a proper degree of 'oddity' between the tram and the crystal, I will ask for the loan of a half-dollar (or florin as the case may be) marked in any way the owner pleases."

He replaces the ball on the table, and in the act of again turning to the audience gets hold of the waxed disc and draws it away from the body, holding it clipped between the ends of the first and second fingers, the left thumb pressing the thread against the cloth top of the tramway, and acting for the time being (and indeed throughout the trick) as a brake neutralising at pleasure the pull of the weight.

He receives the coin on the tramway; then picking it up with the right hand, makes some observation as to the mark, meanwhile pressing the waxed side of the disc against it, then replacing it, disc down, in the middle of the tramway.
"I shall now, by means of the 'od' force, compel the coin to move towards me." This he does accordingly, by relaxing the pressure of the thumb upon the thread and merely bringing the pull of the weight into operation. When the coin has all but reached the nearer end of the tramway, he says, "We will now see if we can make it travel a little longer distance." So saving he draws the thread out again and lays the coin on the farther end of the tram, and again makes it travel slowly back. A good effect may be here produced by making it stop half-way, and (after remarking in a casual way that the power is hardly strong enough) picking up the ball, again rubbing it upon the sleere and moving it, a few inches distance, in the direction in which the coin is to travel, when it resumes its journey accordingly.

Once more picking up the coin, he replaces it at the farther end of the tramway, but in so doing passes the thread outside and around the screw at that end. He then remarks, as if bethinking himself: "By the way, a lady suggested the other night that the coin was attracted towards me by my personal magnetism. I know I am an attractive man: I have been told so frequently but that is not the explanation in this case, as I will prove to you by making the coin travel away from me." So saying, he draws the coin towards him, easing off the pressure on the thread to enable him to do so, and leaves it at the inner end. The ball is
now moved away from himself, and the pressure of the brake being relaxed, the coin is now drawn in the same direction.
"Quod erat demonstrandum," as our old friend Shakespeare (or was it Euclid) used to say." (To the lender of the coin.) "You must take care of this coin, Sir; it is now charged with a minute quantity of the 'od' force, and so long as you keep it you can never be 'stony-broke.' I will show you just one more effect with it before I return it to you."

While speaking, he has carelessly picked up the coin, and replaced it on the inner side of the screw so that this shall be no longer encircled by the thread. Picking up the match box from the table, he pushes out the "tray" portion with the forefinger; then throwing aside the outer case, he picks up the tray, and inverts it over the coin.
"I will now show you that the 'od' force still operates even though it is cut off from any direct connection with the subject of the experiment: but in this case a little more power is required." So saying he rubs the glass ball again on his coatsleeve, and, moving the ball accordingly, causes the coin to travel towards him, the matchbox naturally moving with it. In again picking up the coin, to return it to the owner, he detaches it from the disc, which flies back to its original resting-place.

## THE MYSTERY OF THE THREE SEALS

This is a trick involving some little trouble in the way of preparation, and perhaps a little more than average address on the part of the performer, but on the other hand it costs little; for all the needful appliances may be homemade, and in the hands of an expert the trick will amply repay the time and trouble expended upon it. Baldly stated, its effect consists in the magical introduction of a marked coin into the innermost of a nest of three envelopes, each securely sealed.

The requirements for the trick are as under:

1. Two nests of envelopes. The innermost of each is one of the little square kind used in shops to contain copper "change," or to hold the weekly wage of an employee. It should be of cartridge or stout manila paper, and about two inches square. The next larger is of the ordinary square or socalled square-note size, and the third a little larger still. Envelopes of the two last mentioned sizes are not always to be obtained made of cartridge or manila, but this condition is not in their case absolutely essential. The flap of each envelope must be stuck down and sealed with red wax. ${ }^{1}$
2. A special envelope, which we will call the

[^16]"trick" envelope. This is of the same size and kind as the innermost of the nested envelopes but has undergone special preparation as follows: Taking two ordinary envelopes, cut round the edges of one of them with a penknife, completely dividing back from front. Take the plain or nonflap side of the one so treated, lay it squarely under


Fig. 36
the flap of the other, and stick the flap down upon it in the ordinary way: then add a seal of red wax, as closely as possible corresponding in appearance with the two seals of the innermost of the nested envelopes. Lastly, cut away the superfluous paper round the seal and the edges of the flap. The envelope will now be shown as in Fig. 36 , and when closed will have the appearance of an envelope sealed in the ordinary way, though it
as yet lacks the connecting medium for actually securing it.
3. The "coin mat" (page 4) freshly treated with the usual adhesive. The side so treated is to be turned downwards on the table with a shilling pressed against the adhesive portion.
4. A penknife, to be used as envelope opener.

As shortly as possible before the presentation of the trick, the trick envelope must be further prepared by spreading a thin layer of seccotine on that portion of the underside of the flap immediately under the seal.
N. B. This must not be done too long beforehand, as it is essential to the success of the trick that the envelope be used while the seccotine is still in a "tacky" condition.

The envelope prepared as above, to be laid on the table, behind some small object, or preferably just inside the foremost rim of a Japanese tray; at one corner, mouth uppermost, and flap to the rear. Under these conditions, the butting of the opposite edge of the envelope against the forward wall of the tray will be found greatly to facilitate the subsequent introduction of the borrowed coin. Before so placing the envelope, its edges on each side should be pressed slightly inwards, so as to make it expand a little at the opening.

These arrangements duly made, the performer may introduce the trick as follows:
"I don't know whether anybody here remembers

George the Third, I can't say I do myself. He was before my time, but there is a funny little story told about him. One day when out for a walk, he went into a farmhouse where he found the family having their dinner. One dish consisted of appledumplings, and the question crossed the King's mind, 'How on earth did the apples get into the dumplings?' He didn't like to ask, but he couldn't get the puzzle out of his head. He thought about it so much and it worried him so that at last he went clean out of his mind. He became non compos mentis, which is the doctors' polite way of saying dotty.
"I mention this story by way of a caution. What I am going to show you is ever so much more incomprehensible than any number of apple dumplings; in fact, so extra-extraordinary that if anybody here was the least bit excitable and I sprung it upon him unawares he might go dotty like old Georgie. So if any of you feel at all nervous, don't hesitate to go home, or you can go and sit on the stairs till this particular experiment is over. Nobody moves! I am pleased to find that you are all so strong-minded, but if anything happens don't blame me.
"I have known strong men; men of massive intellect, like myself, come here with a smile on their faces, but when they left the smile was replaced by an air of grim determination. You could see at a glance that they had made up their minds to find
out how it was done, or die. They haven't come again: so I suppose ther died. ${ }^{1}$
"As you are prepared to run the risk I will ask some gentleman to oblige me with the loan of a shilling, marked in some unmistakable way. Thank you, Sir. You have marked the coin? Then please place it here, on this little tray. I won't touch it myself at present. All please keep one eve upon it, the other eye you had better keep on me."

Receive the coin on the mat. held in right hand. After showing the left hand empty, transfer the mat to that hand and show the right emptr. Return the mat to right hand, but before doing so turn that hand over so as to receive the mat with thumb undermost. Just as rou reach the table to place the mat upon it bring the second and third fingers over the borrowed coin, and under cover of your own body turn the mat over. In putting it down on the table draw away the borrowed coin into the hand and palm it. To the eye of the spectator the state of things will be unaltered, your own coin, now uppermost on the mat, being taken for the borrowed one.

You continue, standing behind your table, and resting the right hand. with the palmed coin, close to the trick envelope, and holding up the two nests

[^17]in the other hand: "I have here two envelopes, or, to be exact, six envelopes, for each of those you see contains two more, one within the other: all carefully sealed. I am going to pass the coin this gentleman has lent me into the innermost of one or other of them, I don't care which, for they are exactly alike, so I shall leave the choice to yourselves."

While you are speaking as above the disengaged hand slips the genuine coin into the trick envelope, closes it, pressing the flap well down, and palms it, dropping it a moment or two later into a pochette till needed.
"You decide for this envelope? Just as you please. As the other will not be needed I will ask somebody to open it, and bear witness that things are exactly as I have stated."

Leaving the chosen envelope on the table in full view and bringing forward the other, have the latter opened by some member of the company with the penknife. Hand the envelope produced from it, with the knife, to a second spectator, to be dealt with in like manner. When the innermost is reached, have this opened by the lender of the marked coin: this apparent proof of good faith tending to make him less critical when, at a later stage, he is invited to do the same with the trick envelope.
"Nothing could be fairer, could it? You will all agree that it would have been impossible to intro-
duce anything into the innermost of those three envelopes without breaking all three seals. When I say impossible, of course I mean impossible to a mere man. To a magician there is no such word as impossible, except in the dictionary. In fact, the more impossible a thing is, the more any respectable magician makes up his mind to do it. Watch me carefully, please. I want you to be quite sure all through that there is no deception.
"Now then, to pass the coin into this other envelope." As you say this, you pick up the coin mat, depress it enough for all present to see the coin upon it, and make the motion of sliding it off into the left hand. This should be done while standing a little in front of your table. In turning to replace the mat, reverse it and lay it with the side to which the coin adheres downwards. If deftly executed, this reversal of the mat will be imperceptible, as it is covered by the turn to the table. Even if it were noticed it would have practically no significance for the spectators, who naturally take it for granted that the coin has passed from the mat into your hand. The moment you have laid down the mat, the now disengaged hand picks up the nest of envelopes, and you make believe to rub the coin (supposedly in left hand) into it. This done, you hold the envelope aloft in each hand alternately, allowing it to be seen that the hands are otherwise empty.
''So far, so good! The coin has passed from my
hands into the innermost envelope. But I don't expect you to take my word for it. Will you, sir" (any given spectator) "open the outermost envelope, first, however, satisfying yourself that it is still securely sealed?"

It is just possible, though not very likely, that the person to whom the envelope and penknife have been handed may notice, and remark audibly, that he cannot feel any coin in the envelope. If such a remark is made, you reply that the coin naturally had to be de-materialised before it could pass into the envelope, and it will take a few minutes for it to re-materialise, but it will become gradually more solid, and will then be distinctly perceptible.

The outer envelope having been opened you take back its contents, and under pretext of getting as many witnesses as possible to fair play, have the next envelope opened by a second person, seated at some little distance from the lender of the shilling. The last named gentleman is invited himself to open the last envelope, or rather, the trick envelope, which you in transit substitute for it. Having already opened a precisely similar envelope, and found it securely fastened, he is not likely to anticipate anything different about this one. If he uses the penknife and cuts it open along the edge of the flap in the usual way he will naturally hold it with the thumb upon the seal and all will be well. As a rule, he will be more concerned to identify the coin as the one he lent than to seek for any sus-
picious feature about the envelope. Even in the unlikely case of his tearing open the envelope, instead of cutting it, it is doubtful whether he would detect the use of the seccotine, which should by this time be practically dry; and by the rest of the spectators it would still be taken for granted that this envelope, like the rest, was sealed in the ordinary way.

It will be obvious to the expert reader that the central idea, riz., the transformation by the use of seccotine of an open envelope into one apparently sealed in the regular way, is one that admits of a wide variety of detail as to the mode of presentation. For instance: The procedure suggested for getting rid of the duplicate coin, and apparently rubbing it into the envelope, is but one of many alternatives. The coin might be "passed" by the agency of fire, i.e., wrapped in a piece of flash paper with open fold at bottom and flared off at the psychological moment over a candle flame), or it might be got rid of by vanishing it into the pocket of a black art mat, or by the use of a black art patch, as described at page 20.

The critical part of the trick is the "switching" of the two envelopes at the final stage, but in view of their small size this is a matter of very little difficulty. The expert will probably do this after some fashion of his own. The less instructed reader may use the following plan, which he will
find by no means difficult of execution, though it will need some little practice to work it neatly.

While the second envelope is being opened, get the trick envelope from the pochette into the right hand, clipping it against the second and third joints of the second and third fingers, with the "seal" side turned away from them. When the genuine envelope is handed to you receive it with the left hand, and immediately transfer it to the right, pushing it between the fingers and the palmed one, with the seal facing in the same direction. The moment it is masked by the fingers push the trick envelope outward with the thumb, bringing this into view in its place. Smartly executed the change is instantaneous and cannot possibly be detected. The apparent object of passing it from hand to hand is to have the left hand empty and so free to take back the penknife from the last holder. From this point all will be easy, as it is the trick envelope which is now alone in view, and all you have to guard against is any accidental exposure of the one now hidden in the hand.

This description may justly appear somewhat long-winded, but its length is occasioned by the number of small details demanding notice. In performance, the trick should not take, at most, more than ten minutes. The introductory patter may of course be shortened at pleasure.

## THE WIZARD'S POCKETBOOK

This is an extremely small volume, consisting in fact of six pages only, and no letterpress, the instructions for its use being embodied in a separate leaflet. On each of its pages are miniature reproductions of thirty-six playing cards, six in a row; every card of the pack being represented once at least among the whole number. The object of the book is to enable the owner to discover the name of a card drawn (or merely thought of) by some member of the company. The chooser is only asked to look at the book, and state on which one or more of its pages the card in question appears, when the performer, without seeing or handling the book himself, can instantly name the card. The six pages of the book are reproduced in the diagrams which follow. Figs 37-42.

To be in a position to work the trick, it is necessary in the first place to memorise each of the fiftytwo cards of the pack in connection with a particular number. This may at first sight appear a formidable undertaking, but it is not so in reality.

All that really needs to be memorised is the order of the suits; which is as under :

1. Clubs.
2. Hearts.
3. Spades.
4. Diamonds.

This order may be instantly recalled by using as


Fig. 37
4
$\left[\begin{array}{ll}6 & 4 \\ 9 & 4 \\ -6 & 4\end{array}\right]$

$\begin{array}{ll}\diamond & \diamond \\ \diamond & \diamond \\ \diamond & \diamond\end{array}$

$4 \% 4$
$\left.\begin{array}{ll}\circ & \% \\ \% & \% \\ \% & \%\end{array}\right]$



Fig. 38


Fig. 39



| $\rho$ |
| :--- |
| $\nabla$ |


$\begin{array}{ll}- \\ + & 4 \\ - & 4\end{array}$

|  | 4 |
| :---: | :---: |
| 4 | 4 |
| 4 |  |


$\left.\begin{array}{ll}0 & 0 \\ 0 & 0\end{array}\right]$

$\left.\begin{array}{ll}0 & 0 \\ 0 & 0 \\ 0 & 0\end{array}\right]$
$\left.\begin{array}{ll}0 & 0 \\ 0 & 0 \\ 0 & 0\end{array}\right]$
$\begin{array}{ll}0 & 0 \\ 0 & 0 \\ 0 & \Delta\end{array}$


Fig. 40


Fig. 41
$\left[\begin{array}{ll}0 & 0 \\ 0 & 0\end{array}\right]$


| 8 | 0 |
| :--- | :--- |
| 0 | 0 |
| 0 | 0 |
| 0 |  |


$\left[\begin{array}{ll}0 & 0 \\ 0 & 8 \\ 0 & 8 \\ 0 & 0 \\ 0 & 0\end{array}\right]$

$\left[\begin{array}{lll}0 & \diamond \\ \diamond & \diamond \\ 0 & \diamond & \Delta \\ \Delta & \Delta\end{array}\right]$
$\left.\begin{array}{lll}\Delta & 0 \\ \diamond & 0 \\ \diamond & 0 \\ \diamond & 0 & 0\end{array}\right]$


| 0 | 0 |
| :--- | :--- |
| 0 | 0 |
| 0 | 0 |

$\left[\begin{array}{ll}8 & 0 \\ 0 & 0 \\ 0 & 0\end{array}\right]$


| $\theta$ | 8 |
| :--- | :--- |
| 0 | 8 |



Fig. 42
a memory-peg the word $C H a S e D$, which contains the initials of the four suits in the proper order, or the reader may if he prefers it recall them by reflecting that

## Cool Heads Soon Decide.

The arrangement of each suit follows the natural order, the ace of clubs being No. 1 ; the deuce 2 ; and the trey 3 ; knave 11; queen 12 and king 13. The card next following, riz., the ace of hearts, will be 14 ; the deuce of hearts 15 , and so on, the complete arrangement being as shown below:

1. Ace of clubs.
2. Deuce of clubs.
3. Trey of clubs.
4. Four of clubs.
5. Five of clubs.
6. Six of clubs.
7. Seven of clubs.
8. Eight of clubs.
9. Nine of clubs.
10. Ten of clubs.
11. Knave of clubs.
12. Queen of clubs.
13. King of clubs.
14. Ace of hearts.
15. Deuce of hearts.
16. Trey of hearts.
17. Four of hearts.
18. Five of hearts.
19. Six of hearts.
20. Seven of hearts.
21. Eight of hearts.
22. Nine of hearts.
23. Ten of hearts.
24. Knave of hearts.
25. Queen of hearts.
26. King of hearts.
27. Ace of spades.
28. Deuce of spades.
29. Trey of spades.
30. Four of spades.
31. Five of spades.
32. Six of spades.
33. Seven of spades.
34. Eight of spades.
35. Nine of spades.
36. Ten of spades.
37. Knave of spades.
38. Queen of spades.
39. King of spades.
40. Ace of diamonds.
41. Deuce of diamonds.
42. Trey of diamonds.
43. Four of diamonds.
44. Five of diamonds.
45. Six of diamonds.
46. Seven of diamonds.
47. Eight of diamonds.
48. Nine of diamonds.
49. Ten of diamonds.
50. Knave of diamonds.
51. Queen of diamonds.
52. King of diamonds.

The arrangement of the table being once understood, the number associated with any given card in the club suit suggests itself automatically, e.g., the seven of clubs is likewise No. 7 in the list. To ascertain the name of the card corresponding to any of the higher numbers, all that is needed is to subtract from that number 13, or such higher multiple of thirteen as the case will admit, and the difference will represent its position in its own suit.

Suppose, for instance, that the performer desires to know what card answers to the number 20. Deducting thirteen from 20, the remainder, 7, tells him that the card is the seventh (i.e. the seven) of the second suit, viz., hearts. If he wants to know the name of No. 29, he deducts 26, when the remainder, 3 , tells him that the card is the three of the third suit, spades. If the card be No. 40 , the number to be deducted will be 39 , and the remainder, 1, tells him that the card is the first of the fourth suit, viz., the ace of diamonds. After a very few trials, this little exercise in mental arithmetic becomes so familiar that the calculation becomes practically instantaneous.

Going a step further; with each of the six pages
of the pocket-book is associated a special number, known as its "key" number. These are as under:

| Page | 1 | Key | Number | 1 |
| :---: | :---: | :---: | :---: | :---: |
| '، | 2 | " | ، | 2 |
| " | 3 | ، | ، | 4 |
| ، | 4 | ، | ، | 8 |
| " | 5 | ، | " 16 | 16 |
| ، | 6 | ، | ، 3 | 32 |

The memorising of these is also a very simple matter, for it will be noted that the key numbers are the first six factors of the familiar geometrical progression, $1,2,4,8,16,32$. Printed as below:

$$
\begin{array}{cccccc}
\mathbf{1 ,} & 2 . & 3, & 4, & 5, & 6 \\
\hline \mathbf{1 ,} & \mathbf{2}, & \mathbf{4}, & \mathbf{8}, & \mathbf{1 6}, & \mathbf{3 2}
\end{array}
$$

the upper figures, in ordinary type, expressing the numbers of the pages, and the lower, in black type, the corresponding key numbers, a very small amount of study will associate them so closely in the mind as to fix them firmly in the memory.
Having mastered these two simple lessons, the learner is in a position to use the pocket-book. To ascertain the card chosen, he has only to add together the key numbers of the pages in which he is told that such card appears. The total will be the number at which that card stands in the list given on page 185, and, this being known, it becomes an easy matter to name the card itself.

We will suppose, for instance, that performer
is told that the chosen card appears on the second page, and no other. The key number of this page being 2 , the card must be the second in the list, viz., the deuce of clubs. If he is told that the chosen card is to be found on pages 1,3 and 6 : the key number of these three pages being 1,4 and 32 : together making 37, and thirty-seven less twenty-six being eleven, he knows that the card must be the eleventh of the third suit, otherwise the knave of spades. If he is told that the card is on the third, fifth and sixth pages, the key numbers of which are 4,16 and 32 , total 52 , it is clear that the card must be the last in the list, viz., the king of diamonds.

So much for the working of the trick. But the reader, if of an enquiring mind, will naturally ask, "How is this result obtained?" The answer rests upon a special property of the geometrical progression which forms the six key numbers. It is a curious fact that by the use of these six numbers, either singly or in combination with others of the series, any number, from unity up to 63 , can be expressed. Thus, the numbers, $1,2,4,8,16$ and 32 we already have, these being numbers of the series. As to other numbers:

$$
\begin{aligned}
& 1+2=3 \\
& 4+1=5 \\
& 4+2=6 \\
& 4+2+1=7 \\
& 8+1=9
\end{aligned}
$$

$$
\begin{aligned}
& 8+2=10 \\
& 8+2+1=11 \\
& 8+4=12 \\
& 8+4+1=13
\end{aligned}
$$

and so on throughout up to 5 , which being the limit of the pack, is the highest number with which we need concern ourselves.

In making up the pages of the pocket-book, advantage has been taken of this principle. A given card is inserted on that page or pages (and those only) whose key numbers, alone or added together, correspond with the position which the card holds in the list. Thus the ace of clubs will appear on the first page (not because it is the first card, but because the key number of that page is 1) and on no other. The deuce of clubs, in like manner, on page 2 , the key number of that card being two. The next card, the three of clubs, must appear on page 1 and page 2, their key numbers together amounting to 3 . The process as to cards standing at higher numbers is the same. Thus, the ace of spades, being the twenty-seventh card, and twenty-seren being the aggregate of $16,8,2$ and 1 , will appear on the first, second, fourth and fifth pages. Conversely, if the performer is told that the card appears on the four pages last named, he knows that it is the twentr-seventh card, i.e., the ace of spades. Any spaces remaining racant on the page after the whole pack has been dealt with, are filled up by duplicates of cards already figur-
ing on the same page, their appearing under these conditions making no difference to the calculation.

I am indebted to an ingenious amateur, Mr. Victor Farrelly, for the idea of a novel method of using the pocket-book. Mr. Farrelly does not offer of his own accord to show what can be done with it, but keeps it in reserve, for use in a special emergency. Every conjurer meets now and then with the pig-headed person who absolutely declines to have a given card forced upon him, and persists in endeavouring to extract one from some other part of the pack. Armed with the pocket-book, the performer can set such a person at defiance, and indeed get additional kudos from his objectionable behaviour.

He cheerfully gives up the struggle, saying "You seem to think, sir, that I wish to influence your choice in some way. To prove the contrary, I give the pack into your own hands. Shuffle it well. Thank you. Now take from it any card you please. Look at it, and put it in your pocket. You are satisfied, I presume, that I do not know that card? You are quite right. I have not the smallest idea of it, but I shall discover it without the smallest difficulty by a process of mathematical magic. I have here" (producing pocket-book) "a little book of six pages, on each of which thirty-six cards are illustrated. Will you kindly see whether the card you chose is represented among those on the first page? Meanwhile I will divide the pack, which
please remember I have not touched since you shuffled it yourself, into six portions, one for each page of the book." This is done, the six packets being turned face down on the table.

We will suppose that the chosen card is not found on the first page. "Then," says the performer, "this first packet will tell me nothing, and may be disregarded. Now, for the second page, is your card upon that? It is? Then I draw two cards from the second heap, and turn up one of them. And now for the third page. Do you find your card there? You do? Then I take up three cards from the third packet, and again turn up the last one."

We will suppose that the chosen card is not found in either the fourth or the fifth page, but re-appears on the sixth, whereupon six cards are counted off from the corresponding packet, and the last of them turned up. The performer has by this time mentally added up the key numbers of the second, third and sixth pages: viz., 2,4 and 32 , together making 38, and knows therefrom that the card is the thirty-eighth in the list, viz., the queen of spades. He does not however at once display his knowledge, but pretends to make a mental calculation from the cards exposed upon the table, giving, if he so pleases, and the cards lend themselves to it, some fanciful explanation of his method. It seems to me, however, that this last is a needless elaboration. Personally, I should prefer merely
to call attention by name to the cards exposed, and say, "When these three cards appear in conjunction, it is clear that the card drawn was the queen of spades" (or whatever it may happen to be). Any one deluded, as the majority will probably be, into believing that you really infer the name of the drawn card from those on the table, will be farther from the real solution than ever.

## CONCERNING PatTER

It will doubtless have been observed that I have in the foregoing pages been somewhat lavish in respect of patter. I have done so for two or three reasons.

First. in order to enable the reader to form a better estimate of the effect of the trick presented. duly clothed and coloured, to the mind of the spectator. A trick described, however minutely. from the mere mechanical or technical point of riew, gives scarcely more idea of its actual effect than the rough charcoal sketch of the artist does of the finished painting. Secondly, because ready-made patter, if the reader cares to use it, will sare him a considerable amount of trouble. Mr: third reason is more personal, namely, that it has been a labour of lore to do so. To my mind the derising of some little bit of appropriate fiction to serve as introduction to a trick is the pleasantest part of the inventor"s work.

It may perhaps be thought that I have. in some of the more ambitious tricks. been overliberal in this particular. I remember thinking, after witnessing a "show" by Dr. Lynn, a popular performer of the last generation, that he had talked a
great deal, and done very little, and that I had had very little real magic for my money. On the other hand, the loquacious doctor was always amusing, and it must not be forgotten that to amuse, even more than to puzzle, is the raison d'être of the modern magician. It seems to me therefore quite legitimate to use, to a reasonable extent, the art of the raconteur to supplement that of the magician.

If my own patter is in some cases found superabundant, I have at any rate done my best to make it amusing, and if the reader opines that I have not paid sufficient regard to the late Mr. Ducrow's celebrated maxim, "Cut the cackle, and come to the 'osses," he is quite at liberty to cut my cackle to what he may consider more reasonable proportions. No doubt, time would be saved thereby. If, for instance, he were to cut out the little romantic fictions with which I have introduced "The Miracle of Mumbo Jumbo" and "The Story of the Alkahest," and start "right away" with the bare performance of the trick, both could be exhibited in little more time than I have allotted to either alone. Which treatment is likely to give the greater satisfaction to his audience, he must decide for himself.
Where the performer has the gift (for a "gift" it undoubtedly is) of devising effective patter for himself I am strongly in favour of his doing so. Borrowed patter may be likened to a borrowed dress-coat. It is never likely to be an exact fit, and
a "giant's robe upon a dwarfish thief," or the reverse, cannot be expected to be a becoming garment. Every man has, or should have, a style of his own, and it is rarely good policy to imitate that of somebody else. If a low comedy man were to essay to play Hamlet, or a tragedian, however eminent, were to try to give an imitation of Harry Lauder, the result would be likely to be disappointing.
The reader, undertaking to write his own patter, and desirous of making it just what patter should be, will find counsels of perfection in "Our Magic," and the more nearly he can approach them the better. As, however, all have not the good fortune to possess that admirable work, I renture to indicate what to my own mind seem to be the chief points to be aimed at.
It is almost a commonplace to say that the main object of patter is misdirection. As the term is more usually applied, this means something said or done midway in the course of a trick to draw awar the attention of the audience at some critical moment, and to create what the French conjurers call a "temps," i.e., an "opportunity" for doing, unnoticed, some necessary act. But misdirection may very well start at an earlier stage than this: in fact, well in advance of the actual execution of the trick. Each trick should have some sort of introduction, and the patter serving this purpose should be such as to lead the mind of the hearer
away from the true explanation of the marvel, and to suggest, in a more or less plausible way, some other, remote from the real one.

The suggested explanation may be either pseudoscientific, where possible based on some generally accepted truth (and it is surprising what a long way even a few grains of truth go in such cases) ; or it may be downright "spoof," delivered however with due appearance of seriousness. The explanations will naturally fall a good deal short of the George Washington standard of truthfulness, but the most tender conscience need not in such a case have any scruples on the score of veracity. No sane person expects truth in a fairy tale, and a magical entertainment, from beginning to end, is but a fairy tale in action. To put the matter in an epigrammatic nutshell:

Truth is "a gem of purest ray serene," A virtue always to be cultivated,
But such depends,-you'll gather what I mean,On how you happen to be situated. At home, abroad, wherever I may be, I tell the honest truth, and shame the d-.
But when you ask to be deceived. Good gracious!
You can $t$ expect me then to be veracious.
In that case only do I make exception, And most deceive when vowing "no deception."

This function of patter, the leading away the minds of the audience from the true explanation of the puzzle offered them, may be materially assisted
by the introduction, among the "properties" used, of some object professedly essential to the trick, but as a matter of fact having no real concern with the effect produced. The audience take for granted that it must have something to do with the effect, or it would not be used, and are thereby led away the more effectually from the actual explanation. Numerous illustrations of the use of this device will be found in the foregoing pages.
If, in the case of a given trick, the performer is absolutely at a loss to produce a satisfactory fable to introduce it, he may evade the difficulty by stating that he is about to produce an effect for which he cannot himself account, and inviting the assistance of his audience in doing so.

The second function of patter is the calling of the attention of the audience to matters which you desire them to take note of, and to give opportunity to do so. There is small credit to be gained by changing the ace of clubs into the ace of hearts, or making a given article pass inrisibly from one spot to another, unless the spectators have been first made to realise the original state of things, and they must be allowed sufficient time to do so. I have more than once seen an otherwise brilliant show spoilt by being rushed through at railroad speed. The mind of the spectator had not been allowed time to receive clear impressions. The company in such a case disperses with a consciousness of having had a rapid succession of surprises,
but with only a cloudy recollection as to what they were.

In devising, as is sometimes desirable, new patter for an old trick, an endeavour should be made to look at the effect from an entirely fresh point of view, so as to make the trick practically a new one. A remarkable instance of such a transformation is furnished by an incident in the life of RobertHoudin. At one period of his career he was entrusted by the French Government with a very important mission. He was sent to Algeria, specially charged to "astonish the natives," and by his greater wonders to destroy their belief in the pretended miracles of the Aissoua.

Among other surprises, he decided to make use of his "Light and Heavy Chest," a chest which, as the reader is doubtless aware, became at command, by means of an electro-magnet in the pedestal on which it rested, so "heavy" that the strongest man could not lift it from its base. This trick, produced at a time when the phenomena of electricity were but little understood, has produced an immense sensation at his Paris performances. But the Master instinctively felt that the trick in that shape would produce little or no effect on the more primitive mind of the Arab. He would simply have taken for granted some mechanical means of holding down the chest, beyond his own comprehension, no doubt, but by no means to be regarded as miraculous. Robert-Houdin decided
to change the mode of presentation altogether, and to make the illusion no longer objective, but subjective. He announced that by means of his magic power he could take away the strength of the strongest man, and render him weak as a little child. The "chest" was in this case merely brought forward in a casual way, as a convenient object wherewith the assertion of the magician could be tested. The strongest man in the company was invited to come forward, and try whether he could lift that little box. Of course he could, and did; a child could have done the same. "You lifted it because I permitted you to do so," said the magician. "But I take away your strength. Try to lift it now!"

Again the athlete tries his strength, but now he fails. With teeth set, and every muscle tense, he strains, and strains, but in vain, and he has to confess that the infidel wonder-worker has, for the time, taken away all his strength. Here was a wizard indeed!

In arranging your patter, be humorous if you can, but if, like the gentleman we have all heard of, you "joke with difficulty," don't force yourself to be funny. That it is possible for a man lacking humour still to be a great conjurer is proved by the case of Hartz, who was notably deficient in this particular, but by his excellence in other directions won a place in the very first rank of his profession. But if you cannot be humorous, at any rate be
cheerful. Geniality of manner is one of the most valuable assets of the conjurer. Above all, don't be nervous. You may say "I can't help it," but to a great extent you can. It is largely a matter of will. Start with the idea that all will go well, and it will probably do so. On the other hand, a lowspirited conjurer always makes a low spirited audience.

In any case, be sparing of puns, which have been deservedly described as the lowest form of wit. A single pun, if good enough (or bad enough) may win a laugh, and score to your credit, but to pepper an audience with verbal shrapnel in the shape of puns is an outrage on good taste.

Passing to the third function of patter, the misdirection of attention in the course of a trick, we will assume that you have made a start in the right direction at the outset, by suggesting some fanciful explanation of the effect you intend to produce, so that your audience, starting from wrong premises, do not know the points at which their too close observation would be inconvenient. The best way of diverting their attention at one of these critical points is obviously to attract it to some other direction. A mere sentence, particularly if accompanied by appropriate action, will suffice. Supposing, to take an elementary instance, that the performer desires to drop unseen into the profonde from his left hand some small article for which he has just deftly substituted a duplicate, now exhib-
ited in the right hand, he has only to say, "Now I want you particularly to keep an eye on this"whatever the article in the right hand may happen to be. All eyes are for the moment, instinctively drawn to the object in question, and in that moment the deed is done. The artifice is ridiculously simple, but it is effective, and it is on being fully prepared with the right thing to say and do at the critical moment that the success of a magical entertainment largely depends. Careful rehearsal, preferably before an expert friend, will furnish the best hints as to the danger-spots in the working of a trick, and how best to derise patter to meet them.

A final word of advice-adrice that has been often given, but cannot be too often repeated if you really aim to carry your audience with you. Never lose sight of the fact that rou are, in the words of Robert-Houdin, "an actor playing the part of a magician," and take your office seriously. In particular, never before an audience use the word "trick," which at once gives awar all your pretension to magical power. An actor never tells his audience that he is an actor or that he is playing a part. He does not call their attention to his make-up, however excellent, or tell them that his wig comes from Clarkson. On the contrary, he does his best to make his audience for the time forget that he is Hubert de Barnstormer, or whatever his stage name may be, and to keep up the illusion
that he is actually the person whom he represents. The modern magician should do the same. If he has enough of the true artistic spirit to imagine, when he steps forward on the platform, that he is a magician, and that his miracles are genuine, he will go a long way towards producing a like impression in the minds of his audience. Bearing this in mind, describe what you propose to do as an "effect," a "marvel," an "experiment," or a "phenomenon"; never by any chance as a "trick."

It may be objected that I have myself repeatedly used the obnoxious word in the course of the foregoing pages, but that is another matter. This book is written by a conjurer for conjurers: and as between ourselves we are forced to admit, painful though it be to do so, that our greatest miracles are only tricks. But we need not tell the public so. Logically-minded persons know it well enough, if they are allowed to think about the matter. Our business is to make them, for the time, forget it. A wise old Roman said: Populus vult decipi: decipiatur. Your audience wish to be deceived; in fact they have come together for that purpose. By all means let them be deceived to the top of their bent; and the first step towards effectually deceiving them, is to persuade them, if possible, that there is "no deception."

The patter for a given trick, once composed, and tested by a few performances in public, may thenceforth, so far as the professional is concerned,
be left to take care of itself. It should automatically improve with each of its earlier repetitions as good wine improves in bottle. Faults will correct themselves, and being made perfect by practice, the performer will thenceforth be able to "speak his piece" without effort, and devote his whole energies to the actual working of the trick.

To the amateur, only performing on special occasions, with perhaps considerable intervals between them, I commend a plan from which I myself derived great benefit, viz: Write out from memory the patter for each trick on the programme a day or two before a coming performance. After you have given your show, go through your manuscript again carefully, noting and correcting it in any point in which the patter failed to be exactly right. The interpolation of a single sentence, the transposition in point of sequence of two movements, or the alteration of some trifling detail, such as standing at a different angle to your table at a given moment, may make all the difference between partial failure and complete success.

## THE USE OF THE WAND

Closely connected with the subject of patter is the use of the wand, which in my own opinion cannot be too sedulously cultivated. To the cases in which the wand itself forms the prominent item of the trick, I devoted a special chapter in "Later Magic." To these therefore I need not further refer. More important, however, is the part played by the wand from the point of view of general utility.

In the first place, it is the only remnant of the traditional outfit of the magician. Time was, when the regulation costume of the wizard was a sugarloaf hat, and a robe embroidered with highly coloured mystic symbols. Such a robe is still worn as part of their make-up, by Chung Ling Soo and a few other Orientals, but the orthodox costume of the latter-day wizard is ordinary evening dress. The wand alone remains; the symbol and the professed instrument of his mystic powers, and from its traditional connection with magic, there is a special prestige attached to it.

For these reasons alone it would be desirable to retain the use of the wand, but apart from them, its practical uses are many and various. One of
the first difficulties of the novice, as he comes forward to introduce himself to his audience, is to know what to do with his hands. He can hardly advance with hand on heart, within his vest, à la Pecksniff. Held open, with arms hanging down by the sides, the hands look too stiff, and to advance with them in his pockets would hardly be good form. By coming forward wand in hand, he avoids these difficulties. The hand holding it automatically assumes an easy and natural position, and he ceases to think about the other. With the wand held in the right hand across the body, its free end resting on the palm of the opposite hand, he is in an ideal attitude for delivering his introductory patter. Later on, by holding the wand in the hand, he effectually disguises the fact that he has some object, a card, a coin, or a watch concealed therein. If he has occasion to call attention directly to any object, the wand forms the most natural pointer. If he finds it necessary, for some reason connected with the trick in hand, to make a turn or half-turn away from the spectators, the fact that he has left his wand upon the table affords him the needful opportunity.
Lastly, if the wand is habitually used as the professed instrument of a desired transposition or transformation, a certain portion of an average audience gradually becomes impressed with the idea that there really must be some occult connection between the touch of the wand and the effect
produced. There is much virtue in what may be called a magical atmosphere, and after the wizard has proved his magical power by performing two or three apparent impossibilities, the mind of the spectator (though in his calmer moments, he knows, or should know, better), is led to adopt in a greater or less degree the solution "forced" upon him by the conjurer. Habitual use of the wand, with apparent seriousness, goes far to create the desired atmosphere.

A good effect may be produced by "electrifying" the wand now and then, by rubbing it with a handkerchief. The main uses of electricity are so widely known, and so little understood by the million, that they are quite ready to give it credit for still more marvellous possibilities.

My friend Mr. Holt Schooling, mentioned in connection with The Secret of the Pyramids, finds an additional use for the wand. He uses, not one only, but half a dozen, of different appearanee, each credited with some special magical virtue. At the outset of his show these are arranged horizontally, one above another on pins projecting from a small sloping blackboard. For each fresh trick the wand professedly appropriate to it is brought into action, the one last used being at the same time replaced on the stand. The spectators do not suspect that behind each top corner of the board is a small servante, enabling the performer, under cover of the change of wands, to change a pack of
cards, or to effect some other substitution necessary for the purpose of his next item.

Verbum sap, by all means cultivate the use of the wand, and for the sake of effect, let it be of an elegant and distinctive character. An office-ruler or a piece of cane would serve many of its mechanical purposes, but would lack the prestige attached to what is, professedly, the genuine article.

One of the most striking proofs of the extensive use and appreciation of the wand by modern magicians is furnished by the remarkable collection of such implements got together by Dr. Saram R. Ellison, of New York.

Dr. Ellison ${ }^{1}$ is an eminent and popular physician, whose ruling passion is wanting to know things, particularly things that other people don't know. Such being his temperament, it goes almost without saying that at an early period of his career he became a Freemason. Having been duly initiated into the mysteries of the ordinary lodge, and learnt all it had to teach him, he still yearned for "more light," and accordingly worked his way up step by step through intervening degrees in masonry till he reached what is known as the thirty-third degree, an order even more exclusive than that of the Garter, and claiming to possess secrets as to which the ordinary "blue" mason,

[^18]even though he be a Past Grand Everything, knows no more than the veriest outsider.

When in this direction there were no more mysteries left for him to conquer, Dr. Ellison naturally turned his attention to Magic: and in accordance with his habitual determination to know all that there is to be known with regard to his hobby for the time being he began to collect books upon the subject. At first there were but few to collect, but the literature of magic has grown, and grown, and side by side with its advance Dr. Ellison's collection has grown larger and larger till it numbers some hundreds of volumes. Harry Kellar, the dean of American magicians, and himself an enthusiastic collector, yearned to possess it, and offered the doctor for it the handsome sum of two thousand dollars, equivalent in English money to about four hundred pounds. But Dr. Ellison was not to be tempted. In order that the collection should be preserved intact, he donated it, some years ago, to the New York Public Library, also providing a fund for its upkeep and further development.

But Dr. Ellison's interest in, and services to Magic did not end here. He has made a collection of models, entirely the work of his own hands, of the appliances for over sixty stage illusions. Some are of full size, others quite miniature affairs, but one and all exact to scale. Further, the doctor has a special affection for souvenirs of
famous magicians, past and present, especially in the shape of wands, as being the most characteristic possession of the wizard. Accordingly, some years ago, he began to collect wands, and he now possesses more than eighty such, each a wand which has been habitually yielded by some more or less famous magician. By the courtesy of Dr. Ellison I am enabled to furnish particulars of some of them; as given in a very interesting pamphlet by Epes W. Sargent, a well-known American writer.

The catalogue commences with a wand formerly belonging to Professor Anderson, the once famous "Wizard of the North." Here are found also the wands used by the two Herrmanns (Carl and Alexander), Buatier de Kolta, Lafayette, Martin Chapender, Carl Willmann and others who tread the stage no more. As regards the living, there is here a memento of nearly every English-speaking conjurer of note: besides many others of cosmopolitan celebrity.

The wand here exhibited is not always the conventional ebony and ivory affair, some of the specimens being indeed of a highly original character. For instance, the wand contributed by a Hindu magician consists of the leg bone of a sacred monkey from the temple of Hanuman, the monkey god, at Benares. The wands of Madame Adelaide Herrmann and Chung Ling Soo take the shape of fans. Horace Goldin's is a cut-down whip-handle, and those of Clement de Lion and Imro Fox are
portions of one-while walking-sticks, promoted to a nobler use. Mr. J. N. Maskelyne's "wand" is an ordinary file, which, from the inventor point of view, he regards as the greatest of wonder-working appliances.

My own contribution may claim to be of exceptional interest, not merely as being in itself a curio, but as a memento of a very remarkable man, so remarkable, indeed, that a brief notice of his career may be interesting. It was presented to me by Professor Palmer, a gentleman who was not, like myself, a bogus professor, but the real thing, and withal an exceptionally eminent man. Skill in sleight-of-hand was the least of his accomplishments. He had a marvellous gift of tongue, there being scarcely a European or Oriental language with which he was not thoroughly familiar. He was born at Cambridge in 1840, and from his earliest years showed indications of his peculiar gift for acquiring languages. As a school-boy he made friends among the gipsies, and learned to speak their queer language so perfectly as to deceive even those to whom it was their native tongue. In later life it was a favourite joke of his to saunter, in company with his equally accomplished friend, Leland, into some gipsy encampment where they were not known, and after paying their footing by having their fortunes told, to ask some of the nomads gathered round the fire, to talk a little Rommany for their benefit. Gip-
sies are chary of speaking Rommany except among their own people, and the inquisitive strangers were frequently told that there was no such language; whereupon, one of them would turn to the other, and in purest Rommany quietly express an opinion that their temporary hosts were not thorough-bred gipsies, but of some inferior stock. This produced Rommany in plenty, and the risitors were energetically taken to task for that. being themselves gipsies, they should ape the dress and manners of the Gorgio. A friendly explanation made all end happily.

Palmer made his first start in life as a clerk in the City of London, where in his spare time he made himself master of French and Italian. A little later he took up the study of Persian, Arabic and Hindustani, and speedily conquered them. In 1867, after taking his degree at the University of Cambridge, he was elected a Fellow by his College, an honour conferred on him in recognition of his mastery of the Oriental languages. During the years 1868-1870 he was employed on behalf of the Palestine Exploration Fund, to make a survey of Mount Sinai, in the course of which he became upon friendly and indeed almost brotherly terms with many of the wild Arab tribes, among whom he was known as the Sheikh Abdullah. As in England he had been made free of the gipsy tent, so in Palestine he could drop in upon many a Bedouin encampment, and be sure of a hearty welcome.

His skill in sleight-of-hand, which he had in the first instance taken up merely as a pastime, proved to be of immense service to him in his desert wanderings; adding not only to his popularity but frequently gaining for him the prestige of a genuine magician, and thereby increasing his influence.

In 1871 he was appointed to the professorship of Oriental languages at Cambridge, his official title being the Lord High Almoner's Reader of Arabic. In 1882, in anticipation of the Arabi trouble in Egypt, he was entrusted by the then Government with the difficult and dangerous task of winning over the Sinaitic tribes, and preventing the threatened destruction of the Suez Canal.

His first trip, extending from Gaza to Suez, was carried out successfully, but on penetrating farther into the desert, he and his two companions, Captain Gill, R.E., and Lieutenant Charrington, R.N., fell into the hands of a tribe to whom Palmer was unknown, and were barbarously put to death. Happily, their bodies were recovered, and received from the nation the posthumous honour of burial in St. Paul's Cathedral.

The wand presented to me by Professor Palmer is a curiosity in many ways. It is made of acacia wood (the "shittim" wood of the Old Testament) brought by Palmer himself from Mount Lebanon. Around it, in spiral form, is inscribed an invocation from the Koran, in Arabic characters. The writing of the inscription is a genuine work of art,
having been executed as a special favour to Palmer, by Hassoun, an eminent professional "scribe."

I am reluctantly bound to admit that the Palmer wand, in my hands, did not exhibit any special magical virtues, and when I ceased myself to use it, it seemed to me that it could not find a worthier home than in Dr. Ellison's fine collection.

Reverting for a moment to the subject of patier, I will conclude by quoting, for the amusement rather than the instruction of the reader. an oration which (with variations) now and then formed my introductory boniment, and might on occasion still serve, in default of better.
"Ladies and Gentlemen, and members of the Royal Family, if any happen to be present, I am about to exhibit for your amusement, a few experiments in Unnatural Philosophy, otherwise Magic.
"Magic in the olden times was a very different thing, as I daresay you know, from what it is at present. In those days every respectable wizard kept a familiar spirit: a sort of magical man of all work. He cleaned the boots and knives, and when his master gave a show, it was the familiar who worked all his miracles for him. The magician only did the talking, and pocketed the takings. But the familiar did much bigger things than that. If his master's next-door neighbour made himself disagreeable, the familiar would
hoist him up and drop him in the water-butt, or into the Red Sea, according to order. If the magician wanted a week at the seaside, he had no need to pay railway fare. The familiar would just pick him up, house and all, and land him gently in the middle of the mixed bathing. The only drawback was that, sooner or later, a time came when there was no performance, because the magician had been carried off by his familiar on a pitchfork.
"As the French say, nous avons changé tout cela, Familiars are as extinct as the dodo. Perhaps it's as well, but it makes it very much harder to be a magician. In the first place you must know all about astrology, anthropology, Egyptology and all the other ologies. You must be well posted in mathematics, hydrostatics, pneumatics and numismatics. You must know all about clairvoyance, palmistry and thought reading, sympathy and antipathy, magnetism, mesmerism, wireless telegraphy, X rays and all the other kinds of rays. Of course you must be well up in Greek and Latin, and a little Hebrew, not to mention a few other things which I forget for the moment, but I won't stop to think of them now. When you have studied these little matters fourteen hours a day for nine or ten years, you will be as 'chock-full of science' as old Sol Gills himself, and you will be able to do all sorts of wonderful things, some of which I hope to show you this evening.
"Before I begin, there is just one little matter

I should like to mention. You hear people talk about the quickness of the hand deceiving the eye. I don't know whether the quickness of the hand ever does deceive the eye, but I want you to understand that you must not expect anything of that sort from me. I am naturally slow. I was born twenty minutes after I was expected, and I have been getting slower and slower ever since.
"To-night, I intend to do everything even more slowly than usual: so that you will only have to watch me closely to see exactly how it is all done. Then, when you go home, if you do as I do, and say as I say, without making any mistakes, no doubt you will be able to produce the same results. If not, there must be 'something wrong with the works.'"

## A FEW WRINKLES ${ }^{1}$

Every conjurer who has in him, as all conjurers should have, the creative instinct of the artist, and aims therefore at putting something of himself into his work, must of necessity be to some small extent an amateur mechanic. The hints which follow are addressed to the reader in that capacity. I have no pretension to teach him how to do things in the way of construction, but merely to make the doing of them easier. Though relating to matters in themselves small, the "tips" which follow may safely be said to come within the scope of Captain Cuttle's celebrated counsel, "when found make a note of." It often happens that the amateur mechanic has to take considerable trouble and pains in procuring some special requirement, while there is already on sale, at small cost, just the thing he wants, if he only knew what to ask for, and where to get it. The paragraphs which follow will, in some at any rate of such cases, supply the needful information.

[^19]1. For woodwork on a small scale, an old cigar box will often be found suitable material. Where such a box is not available or not suitable for the particular work in hand, what is called "threeply" may supply the need. This consists of three layers of thin wood glued together under pressure, with the grain of the intermediate layer running crossway to that of the other two, the tendency to warp being thereby greatly reduced. Drawingboards are, for this reason, now usually made of wood so combined, and a drawing-board makes for many purposes a good enough extempore workbench. For a finer class of work, the amateur mechanic, if he is willing to take the trouble, may make his own three-ply. For this purpose he should procure a supply of what is called "knifecut' veneer, i.e., thin sheets of walnut, mahogany, satin,-or other hard wood, and glue them together with the white glue to be presently described. Veneer merchants form a distinct trade, and are comparatively few in number, but the resident in London can obtain veneer and thin woods of all descriptions from Messrs. McEwan \& Son, 282 Old Street, E. C. In country districts the shops which hold agencies for "Hobbies" materials also sell planedup woods of various kinds, ranging like veneer from one-sixteenth to half an inch in thickness.
2. As a handy substitute for glue, most people are acquainted with the virtues of Seccotine, in its way a most useful preparation. But there are
many purposes for which Seccotine is too aggressively viscous, while ordinary paste is not adhesive enough. In such cases I can strongly recommend Pastoid, a romposition midway between glue and paste. For all purposes for which paste (in small quantity) is ordinarily used, Pastoid may be substituted with advantage. I myself came across it accidentally two or three years ago, "since when," like the gentleman in the soap advertisement, "I have used no other." The maker is Henry Roberts, Middlesborough, but it should be obtainable of any up-to-date stationer or fancy dealer. It is supplied in glass jars, at sixpence and a shilling.
3. Where an actual glue, of fine quality, is needed, procure sheet gelatine, to be had of any grocer. Cut into small pieces and melt in an ordinary gluepot using water enough to make the resulting solution about as thick as ordinary gum water. It should be used as near boiling point as possible, and the joined surfaces left to dry under the heaviest pressure available. A joint made with this glue is practically invisible. ${ }^{1}$
4. For dividing up thin stuff (wood or cardboard), into rectangular slabs, the handiest tool is the "cutting gauge." This is practically identical with the better known "marking gauge," save

[^20]that the "marker" is replaced by a little spadepointed cutter. This tool is only a a ailable for cutting wood up to say eight inches in width, but to the amateur attempting small work only, it will be found invaluable.
5. For staining wood or cardboard a deep dead black I have found nothing better than the "Record Jet Stain," manufactured by the Record Polish Company, Eccles, Manchester. It is normally designed for staining leather only, the makers not having apparently realised its usefulness in other directions. It is to be had of any dealer in leather goods, in twopenny and sixpenny bottles. In many cases I have found it best to rub it in with a pad, rather than to apply it with a brush, but this will of course depend largely on the nature of the article to be treated.
6. An excellent polish for use after staining, or for other purposes, is made by dissolving white wax in turpentine, to the consistency of cream. Applied sparingly, with plenty of friction to follow, this produces a clean hard gloss, free from the stickiness which is sometimes left after the use of other polishes.
7. For enamelling small articles use Maurice's Porceleine (the makers of which are Walter Carson \& Sons, Grove Works, Battersea, S. W.) procurable at "oil and colour" men in tins from threehalfpence upwards.
8. For any article to be made of flat card or
mill-board, without folding or bending, preference should be given to "Bristol"' board, sold by artists' colour-men. This is somewhat more expensive but is stiffer and harder and has a better surface than the commoner articles.
9. For joining wood to wood without glue where there is no great thickness to be penetrated, "needle-points," procurable of any ironmonger, will be found useful. These are stout eyeless needles, of very brittle steel, about two inches in length. To use them, bore with a fine bradawl a hole partially through the wood, then drive in the needle-point by gentle tapping with a hammer, and when it has penetrated the desired depth snap off all that remains above the surface.
10. Also useful for many purposes are what are called by drapers "blanket" pins. These are of brass, and a card of such pins in three sizes, ranging from two to three inches in length and varying proportionately in thickness, may be bought for a penny. Pins a trifle shorter and thinner than the above are known as "laundry" pins. Apart from their normal uses, pins of these kinds are very useful for bending into hooks, or to cut up into short lengths of stiff straight wire for pivots or otherwise.
11. For all effects dependent upon a thread pull use, in place of ordinary thread, plaited silk fishing line. This is procurable of any sports' outfitter or fishing tackle dealer, in twenty and forty
yard lengths, and in half a dozen grades of thickness, the finest being not much thicker than a hair line. The breaking strain of this is much greater than that of ordinary thread, and it has the further advantage that being plaited instead of twisted it does not unroll or "kink" in use. Allcock, of Redditch, a name familiar to all anglers, is a noted maker of such line, but he has no monopoly of its manufacture. It is usually sold white, but may be easily dyed any desired colour.

For this last valuable "tip" I am again indebted to my often-quoted friend, Mr. Holt Schooling, who, as an enthusiastic angler, is an expert as to lines of all descriptions. The reader will find numerous instances of the practical use of such line in the earlier part of this book.

A good way of dyeing line is to thread a needle on to one end, and pass it by the aid of the needle through one corner, moistened with the appropriate dye, of a soft sponge, and then back again through the dry part of the sponge to clean off any excess of moisture. When dry, if necessary, repeat the process.
12. Square envelopes, for the purpose of forming "nests" or otherwise, are now and then needed by the conjurer, but envelopes precisely square (save the small variety known as "pence" envelopes) are not kept in "stock" by stationers in the ordinary way. When such are needed the readiest plan is to take an envelope of the long "bag" shape
and shorten it to an exact square, closing the lower end as before. Envelopes of the above kind are procurable in many varieties of paper, and in widths ranging by various fractions of an inch from four inches upwards.
13. To make a line, thick or thin, run freely over a pulley-wheel or through an eyelet, use as a lubricant powdered talcum, otherwise known as French chalk. This is equally useful for minimising friction between wooden surfaces, or between wood and metal, say between a pulley-wheel and the pivot on which it turns. Where the slight extra cost is not an obstacle the use of ivory as the material of a pulley-wheel secures the perfection of easy running.

It is, I trust, hardly necessary to say that wherever I have mentioned an article to be had by purchase, my recommendation is based solely upon practical experience of its merits. I have no interest, direct or indirect, in any of the articles mentioned, and my knowledge of their manufacturers is derived solely from their respective labels.

## L'ENVOI

With these last lines I lay down my pen, as I have long since laid down the wand. I do so with regret, for writing about magic has always been to me a labour of love, but failing energy and failing eyesight warn me that my day is over, and that "the night cometh, wherein no man can work."

When I first began to discourse of magic, I had the whole field, in a literary sense, to myself. That state of things has long since ceased to be. Fertile brains and ready writers have taken up my task, and magic has now a worthy literature, growing day by day. "So mote it be!"

Furthermore, if I may be allowed a word of advice, let me say that every lover of magic. be he professional or amateur, should join a magical society. No great work can be carried forward without organization, and the success of such bodies as The Magician's Club and the Magic Circle here. and the Society of American Magicians over seas. has proved that magic is no exception to the rule.

I must not close without a word of heartr thanks to Harry Houdini, Oscar S. Teale and John W. Sargent, of the Society of American Magicians. for their generous offices in connection with the publication of my book. With this last legacy to the friends, at home and abroad, who have derived pleasure or profit from my writings, I bid them a cheery farewell.

Louis Hoffirann.

# TECHNICAL BOOKS 

## PUBLISHED BY <br> SPON \& CHAMBERLAIN

120-122 LIBERTY ST.
NEW YORK

## ELECTRICITY

THE STUDY OF EIECTRICITY AND TIS IAWS FOR BEGINNERS. By N. H. Schneider. 88 pages, 54 illustrations, $71 / 4 \times 1 \mathrm{in}$., paper; 25 cents.

DRY BATTERIES, How to Make and Use Them. By N, H. Schneider. 59 pages, 30 illustrations, $71 / 4 \times 5$ in., paper, 25 cents.
EIECTRICAI CIRCUITS AND DIAGRAMSS, Part ONE. By N. H. Schneider. Principally devoted to direct current. $71 / 4 \times 5$ in., paper, 25 cents.

ELECTRICAI CIRCUITS AND DIAGRAMS, PART TWO. By N. H. Schneider. Principally devoted to alternating and power plant work. $71 / 4 \times 5 \mathrm{in}$., paper, 25 cents.

SMALL ELECTRICAT MEASURING INSTRUMENTS. How to make and use them. A Practical handbook by P. Marshall. 90 pages, 59 illustrations, paper, 25 cents.
STATIC ELECTRICITY, Simple Experiments in. A series of instructive and entertaining experiments. By P. C. Bull. $V+68$ pages, 49 illustrations, $71 / 4 \times 5$ in., paper, 25 cents.

MODERN PRIMARY BATTERIES, Their construction, use and maintenance. By N. H. Schneider. XII +94 pages, 55 illustrations, $71 / 4 \times 5$ in., paper, 25 cents.
WIREIESS TEELEPHONE CONSTRUCTION. A comprehensive explanation of a wireless telephone equipment for receiving and sending, with details of construction. By N. Harrison. 74 pages, 43 illustrations, paper, 25 cents.

PIANS AND SPECIFICATIONS FOR WIRELESS TEIEGRAPH SETS BY A. F. COIIINS.
Part 1. Complete instructions on making an experimental set, also a 1 to 5 mile set. 55 pages, 37 illustrations, 12 mo., paper, 25 cents.
Part 2. Complete details for a 5 to 10 mile set, also a 10 te 25 mile set. 80 pages, 63 illustrations, 12mo., paper, 25 cents.

MAKING WIRELESS OUTFITS, A concise and simple explanation of the construction and use of inexpensive wireless equipment. By $\mathbf{N}$. Harrison. 61 pages, 27 illustrations, cloth, 50 cents.

PRACTICAI EIECTRICS. The universal handy book on everyday electrical subjects. 135 pages, 126 illustrations, $7 / 1 / 2 \times 5$ in., cloth, 50 cents.

HOW TO INSTAIL ELECTRIC BRLIS, ANNUNCIATORS AND ALARMS, including battery, wiring, etc. By N. H. Schneider. Second edition, considerably enlarged. XII + 83 pages, 70 illustrations, $71 / 2 \times 5$ in., cloth, 60 cents.

## ELECTRICITY

INDUCTION COIMS. How to make and use them. A practical handbook on the construction and use of medical and spark coils, by P. Marshall. Revised and enlarged. 70 pages, 35 illustrations, cloth, 50 cents.

INDUCTION COIMS, How to Make and Use Them, including Ruhmkorff, Tesla and Medical coils. By H. S. Norrie. Second edition revised and enlarged. XVI + 269 pages, 79 illustrations, $71 / 2 \times 51 / 4$ in., cloth, $\$ 1.00$.

INDUCTION COILS. Experimenting with. Practical directions for making the apparatus and operating it, by N. H. Schneider. 73 pages, 20 illustrations, 25 cents.

TELEGRAPHY FOR BEGINNERS. The standard method with lessons. By W. H. Jones. Second edition, revised; VI +58 pages, 19 illustrations, cloth, 50 cents.

SMALI ACCUMUTATORS. How to make and use them, by P. Marshall. Third edition, 80 pages, 40 illustrations, 12 mo ., cloth, 50 cents.

ELECTRIC GAS IGNITING, How to Install Gas Lighting Apparatus. By H. S. Norrie. VIII +101 pages, 57 illustrations, $71 / 2 \times 5$ in., cloth, 50 cents.

MAGNETO TELEPRONE. Its construction, fitting up, and use. By N. Hughes. VII +80 pages, 23 illustrations, cloth, 50 cents.

WIRING HOUSES FOR THE ELECTRIC LIGHT. By N. H. Schneider. Secona edition, revised and enlarged. VIII + 112 pages, 45 illustrations and 9 page plates, $71 / 4 \times 5$ in., cloth, 50 cents.

LOW VOITAGE ELECTRIC LIGHTITIG WITH THE STORAGE BATTERY. Showing latest American types and complete outfits. By N. H. Schneider. Second edition, revised and enlarged. $X+94$ pages, 31 illustrations, $71 / 4 \times 6$ in., cloth, 50 cents.

EIECTRIC WIRING CALCUIATION. The Herrick Planigraph, arranged as a set of four moving cards, solving all problems of wiring for branches, feeders and mains, electric railways and long distance transmission, giving the size of copper conductors required. Size, $51 / 2 \times 53 / 4$ in., 50 cents.

THE MECHANICS OF EIECTRICITY, by F. J. B. Cordeiro. The object of this work is to show that Electricity and the Ether are identical. VI + 78 pages, 7 illustrations, $7 \%$ x $51 / 2$ in., cloth, $\$ 1.25$.

THE WIMSEURST MCACHINE. How to make and use it, by A. W. Marshall. With complete detailed drawings. Second edition. 112 pages, 30 illustrations and drawings, cloth, 50 cents.

MAGNETS AND MAGNETISM SIMPIY EXPIAINED, by $A$. W. Marshall A practical treatise without mathematics, including the princtples of both permant and electro magnets. 90 pages, 49 illustrations, cloth, 50 cents.

## ELECTRICITY

ATTERNATING CURRENTS STMPLY EXPLATINED. An elementary handbook on generators, transformers and motors, by A. W. Marshall. 90 pages, 33 illustrations, cloth, 50 cents.

PRACTICAL ATTERNATING CURRENTG AND POWER TRANSMISSION. By N. Harrison. Specially intended for the practical man. 375 pages, 172 illustrations, $71 / 2 \times 51 / 4$ in., cloth, $\$ 1.50$.

MAGNETISM CURVES OF MAGNFTIC DATA, for various metals. By S. P. Thompson. A large chart 25 in. $x 16$ in. 25 cents.

DYNAMO DESIGN, SCHEDULES FOR. These sheets are for carrying out dynamo designs according to the method laid down by S. P. Thompson. Five sheets to a set; size $101 / 2$ in. $x 8$ in. Per set, 25 cents. Special price on a quantity.

EIECTRICAL INSTRUMENTS AND TESTInG. By N. H. Schneider. Fourth edition, greatly enlarged. XXIV + 288 pages, 133 illustrations, $71 / 4 \times 5$ in., cloth, $\$ 1.00$.

ELECTRIC POWER PLANTS, Their care and management. A practical handbook for engineers. By N. H. Schneider. 290 pages, 203 illustrations, $71 / 2 \times 51 / 4$, cloth, $\$ 1.50$. Full limp leather, gilt edges, $\$ 2.50$.

EIECTRIC IIGHT FOR THE FARM. By N. H. Schneider. Being Low Voltage Electric Lighting, and Wiring Houses for the Electric Light, complete in one volume. 224 pages, 76 illustrations, $71 / 4 \times 5$ in., cloth, $\$ 1.00$.

## STEAM ENGINEERING

MODEL STEAM TURBINES. How to design and build them. By H. H. Harrison. A practical handbook for model makers. 85 pages, 75 illustrations, paper, 25 cents.

MODEL STEAM ENGINE DESIGN, A handbook of practical information, formulas and tables. By R. M. DeVignier. IX +94 pages, 34 illustrations, $714 \times 5$, paper, 25 cents.

THE FIREMAN'S GUIDE. By J. P. Dahlstrom. A practical handbook on the care of steam boilers, IV +28 pages, $7 \times 5$ in., cloth, 50 cents.

A B C OF THE STEAM ENGINE, with a description of the automatic governor, by J. $P$. Lisk. 30 pages, large folding plates, cloth, 50 cents.

## STEAM ENGINEERING

CORLISS ENGINE. Diagram of longitudinal section of Corliss Engine Cylinder, by J. P. Lisk. $19 \times 13$ in., 25 cents.

THE CORLISS ENGINE AND ITS MANAGEMENT, BY JOFN T. HENTHORN. 95 pages, 25 illustrations, cloth, 50 cents.

HOW TO RUN ENGINES \& BOILERS. Practical instruction for young engineers and steam users. By E. P. Watson. $X+160$ pages, 31 illustrations, $71 / 4 \times 5$ in., cloth, $\$ 1.00$.

CENTRIFUGAL FANS. Theoretical and practical treatise on, Fans or moving air in large quantities at comparatively low pressure. By J. H. Kinealy. XIV +206 pages, 39 diagrams, limp leather pocketbook, \$5.00.

STEAM ENGINES AND BOILERS. An elementary textbook on, for the use of students. By J. H. Kinealy. Sixth edition, VIII +259 pages, 107 illustrations, 8 vo., cloth, $\$ 2.00$.

SLIDE VAIVE SIMPLY EXPLAINED. By W. J. Tennant. Revised and enlarged. By J. H. Kinealy. A practical handbook for engineers. VII +83 pages, 41 illustrations, $71 / 4 \times 5 \mathrm{in}$., cloth, 50 cents.
sIIDE VAIVE. Instruction chart. With full instructions for using it. By J. P. Lisk. Blueprint $14 \times 10 \frac{1}{2}$ in. 25 cents.

TOW PRESSURE STEAM HEATING. A series of charts on heavy folding card. By J. H. Kinealy. Size $13 \times 91 / 4$ in., $\$ 1.00$.

MECHANTCAI DRAFT, A practical handbook for engineers and designers for power plants. By J. H. Kinealy. 156 pages, 13 page plates, $63 / 4 \times 41 / 2$ in., cloth, $\$ 2.00$.

THEORETICAI AND PRACTICAL AMBONTA REFRIGERAMION. A practical handbook for engineers interested in the nanagement of ice and refrigerating machinery. By I. I. Redwood. IX +146 pages, 14 illustrations, $71 / 4 \times 5$ in., cloth, $\$ 1.00$.

IUBRICANTS, OILS \& GREASE. Giving practical information regarding their composition, uses and manufacture. By I. I. Redwood. IX +54 pages. 3 folding plates, $81 / 4 \times 51 / 2 \mathrm{in}$., new edition in press.

ALGEBRA SEIF TAUGHT, by W. P. Higgs. For the use of home students, mechanics and young engineers. 104 pages, $71 / 4 \times 5$ in., cloth, 60 cents.

MECEANICAL DRAWING STMPLY EXPLAANED. A practical handbook for beginners. By F. E. Powell. 78 pages, 44 illustrations, $7 \% \times 5$ in., paper, 25 cents.

## GAS ENGINES

GAS FNGINTE, IN PRINCIPLE AND PRACTICE. Two-cycle and four-cycle types, with description of various design. With notes on gas producers. By A. H. Goldingham. 195 pages, 107 illustrations, $91 / 4 \times 61 / 4$ in., cloth, 75 cents.

CARE AND MANAGEMENT OF GAS EN. GINES. A practical handbook on. By G. Lieckfield. XIV + 103 pages, 14 illustrations, cloth, 50 cents.

THE DESIGN AND CONSTRUCTION OF OII ENGINES. With full directions for erecting, testing, installing, running and repairing; including kerosene engines, and an Appendix on Diesel Engines. By A. H. Goldingham. XXII + 308 pages, 142 illustrations, 48 full page plates, cloth, $\$ 2.50$.

MARINE AND STATIONARY DIESEI ENGINES. Described and illustrated with numerous formulae for their design and instructions for installation and operation. By A. H. Goldingham. XX +206 pages, 135 illustra: tions, 10 folding plates, $73 / 4 \times 5$ in., cloth, $\$ 3.00$.

## CROSS SECTION PAPERS

THE HANDY SKETCFING FOOK, ruled plain, 8ths to one inch, printed on both sides, size $5 \times 8$ in., limp card back, 25 cents.

ELECTRICIANS' SKETCFING BOOK, ruled 10 to 1 inch, with heavy inch lines, blue ink, printed on both sides, size $5 \times 8$ in., 25 cents.

THF FANDY SKETCHING PAD. Plain 8ths to 1 inch, blue ink, printed on one side, size 8 $x 10$ in., 25 cents.

THE FIECTRICTANS' PLOTTING PAD. Scale 10 to 1 in., with heavy inch lines, blue ink, printed on one side, size $8 \times 10$ in., 25 cents.

Scale 8 to 1 inch, heavy inch lines, size 17 x 22 inches per quire, $\$ 1.00$.

Scale, 10 to 1 inch, heavy inch lines, ledger paper, size $17 \times 22$ inches, per quire, $\$ 1.00$.

Scale, 16 to 1 inch, heavy inch lines, size 9 x 11 inches, per hundred sheets, $\$ 1.00$.

ANNUAL SUBSCRIPTION.-POST-PAID.
(Prices Subject to Change)
Models, Railways and Locomotive. (M).......... 2.00
The Process Engravers' Monthly (M)................ 2.00
The Power User (M).................................... 2.00
Science Abstracts, sections $A$ and $B$ (M)......... 7.50
Science Abstracts, either section (M)............. 4.50
Wondworker and Art Metalworker (M).......... 1.50
Junior Mechanics ................................... 1.00


## MISCELLANEOUS BOOKS

NATURAL PHILOSOPHY. Principles of. By F. J. B. Cordeiro. In this book, the action of the tidal couple in changing the axial inclination of a planet, is rigorously demonstrated. vi. 113 pages, 25 diagrams, $81 / 4 \times 51 / 2$ in., cloth, $\$ 2.50$.

THE ATMOSPHERE, ITS CHARACTERISTICS AND DYNAMICS, by F. J. B. Cordeiro. VIII +129 pages, 35 illustrations, $101 / 4 \times 71 / 2$ in., paper, $\$ 1.50$; cloth, $\$ 2.50$.

THE GYROSCOPR, Theory and Practice, by F. J. B. Cordeiro, the most complete treatise on this subject. VII +105 pages, $81 / 4 \times 61 / 2$ in., cloth, $\$ 1.50$.

BAROMETRICAL DFTERMITATION OF HEIGHTS. A practical method of barometrical levelling and hypsometry. By F. J. B. Cordeiro. Second edition, revised and enlarged, $6 \times 4$ in., limp cloth, 50 cents.

TIME OF THE WORLD. Universal Time Card Model. Printed in two colors on stiff card, with movable disk, $9 \times 7$ in., 25 cents.

CONCRETE DAM CONSTRUCIION. The Caisson as a new element in Concrete Dam Construction. By O. G. Aichel. 32 pages, 2 diagrams, 6 large folding plates, $93 / 4 \times 1 / 4$ in., paper, \$1.00.

REINFORCED CONCRETE BUITDING. The Elements of, by G. A. P. Middleton, 111 pages, 53 illustrations, $71 / 2 \times 5$ in., cloth, $\$ 1.50$.

CERAMCDC GLAZES. Arranged for heat of the soft porcelain kiln. By H. Rum Bellow. Series A, Leadless Sanitary Glazes for hard waterproof glazed brick and stone; porcelain enamelled fire-clay sanitary ware; soft porcelain; strong clay ware. From the seven charts formulas for any admixture of glazed materials can be obtained. Folio, cloth, $\$ 10.00$.

GAS ANAIYSTS MANUAI, by Jaques Abady, incorporating Hartley's Gas Analyst's Manual and Gas Measurement, with many valuable tables of data. XV +560 pages, 93 illustrations, 9 folding plates, $8 \frac{1}{2} \mathbf{x} 51 / 2$ in. half leather, $\$ 6.50$.

SODA FOUNTAIN FORMULAS. A practical receipt book of nearly 500 formulas for druggists, confectioners and vendors of soda water. By G. H. Dubelle. Fourth edition, 161 pages, $71 / 4 \times 5$ in., cloth, $\$ 1.00$.

A STSTEM OF EASY LETTERING, by J. H. Cromwell. Consisting of about 40 alphabets of various designs. Twelfth edition, $81 / 2 \times 51 / 2$ in., cloth, 50 cents.

DISTILLATION OF ALCOHOL, A practical handbook on the, from farm products, also the process of denaturing alcohol. By F. B. Wright. Second edition. 281 pages, 52 illustrations and 8 folding plates., $71 / 2 \times 5$ in., cloth, $\$ 1.50$.

## MISCELLANEOUS BOOKS

MOIESWORTE METRICAI TABIES, containing linear. square, cubic and capacity measures; weights; combinations; prices; electrical, etc.; heat. 95 pages, $5 \times 3$ in., cloth, 75 cents.

FRENCH MEASURES AND ENGIISP EQUIVAIENTS. Giving equivalents in inches, and decimals of an inch, of from 1 to 1000 milimetres, and 1 to 100 metres, and table of fractional parts of an inch with corresponding decimals. By J. Brook. 80 pages, $4 \times 3$ in., limp cloth, 40 cents.

BUCFANAN'S TABLES OF SQUARES. Containing the square of every foot, inch, and sixteenth of an inch between $1 / 16$ of an inch and 50 feet. By E. E. Buchanan. 11th edition, $7 \times 4$ in., limp cloth, $\$ 1.00$.

PATENTS, INVENTIONS, How to protect, sel! and buy them, By F. B. Wright. 108 pages, 1 plate, $71 / 4 \times 5$ in., paper, 25 cents.

WINDMILLS \& WIND MOTORS. How to build and run them. By F. E. Powell. Practical guide to the construction of small windmills with detail drawings. VI +78 pages, 76 lllustrations, $71 / 4 \times 5$ in., cloth, 50 cents.

SIMPIE SOLDERING. Both hard and soft, with directions for making home-made apparatus. By E. Thatcher. VIII +76 pages, 52 illustrations, $71 / 4 \times 5$ in., 50 cents.

WOODWORK JOINTS.. How to make and where to use them. New edition, revised and enlarged, 101 pages, 178 illustrations, $71 / 4 \times$ 巨 in., paper, 25 cents.

THE MODES VAUDEVIITE THEATRE. How to construct and operate it. By N. H. Schneider. 90 pages, 34 illustrations, $71 / 4 \times 5$ in., paper, 25 cents.

USEFUL ANIMALS, and their Products. A dictionary of. with glossary of trade and technical terms, by P. L. Simmonds, $63 / 4 \times 41 / 4 \mathrm{in}$., cloth, 80 cents.

HOW TO BUITD A TWENTY-FOOT BIPIANE GIIDER, by A. P. Morgan. A practical handbook on the construction of one of these machines, with full detailed drawings. 60 pages, 31 illustrations, cloth, 50 cents.

HISTORIC MITNES OF MEXICO. Handbook to the. By C. B. Dahlgren. Arranged in tabulated form with two maps, $24 \times 9$ in., limp card cover, $\$ 1.00$.

## LATEST BOOKS


#### Abstract

AERONAUTICAL ENGINES. A critical survey of current practice with special reference to the balancing of inertia forces, by F. J. Kean. Contents of chapters : 1, Nature of the problems. 2, Classification of aeroplane engines. 3, Relative advantages of different types of aeroplane engines. 4, Choosing the number of cylinders. 5, Balancing the sliding part of the engine. 6, Carburation. 7, Ignition. 8, Typical engines. Appendix. Index. Second edition revised and enlarged, 53 illustrations, 29 page plates and 5 large folding


 plates, $83 / 4 \times 53 / 4 \mathrm{in}$., cloth, $\$ 2.50$.LATEST MACIC by Professor Hoffman (Angelo Lewis). A collection of new tricks arranged under the following heads: New appliances, black art principles. card tricks, miscellaneous tricks, 7c, 7c, 222 pages, 43 illustrations, $8 \times 5 \frac{1}{4} \mathrm{in}$., handsomely bound in cloth, $\$ 1.65$ post paid.

## A NEW BOOK ON Magneto Ignition

ITS

## Principles and Applications

WITH<br>Special Reference to

## AVIATION ENGINES

## BY

MICH. E. TOEPEL
Instructor U. S. Government School for the Study of Magneto Ignition

Fully Illustrated

Size $71 / 2 \times 41 / 2$ in.
Limp Cloth-Price $\$ 2.00$


[^0]:    ${ }^{1}$ It is extremely difficult to construct the "pots" so that the pocket is workable on the concave inner surface, but if they are made four, five or six-sided the pocket folds against a flat surface and works perfectly.-En.

[^1]:    ${ }^{1} \mathrm{~A}$ somewhat more elaborate trick of mine on the same principle (The Elusive Card) will be found described in the Magazine of Magic, Vol. II, pp. 13, 47.

[^2]:    1 Better still, thicken the under edge by the interposition between card and velvet of a slip of white card, as described in The Detective Die, post.

[^3]:    1 Since the description which follows was written, it has come to my knowledge that there is already on sale a trick on somewhat similar lines in point of effect entitled The Educated Die. I need hardly say that my own trick, so far as I am concerned, is absolutely original. The advertised description of The Educated Die would suit either trick, but there is little further resemblance between them.

[^4]:    ${ }_{1}$ To endeavor to take all five tricks in the game of Napoleon.

[^5]:    1 This last bit of patter is a plagiarism from somebody or other, I rather think the late Dr. Lynn.

[^6]:    ${ }_{1}$ Rummage.

[^7]:    1 The little dishes of paper pulp sold for pienic purposes will be found to answer this and similar purposes excellently and have the further advantage of being exceptionally portable,

[^8]:    ${ }^{1}$ The handkerchief should be readily recognizable as a cheap and commonplace one.

[^9]:    ${ }^{1}$ This story, as also a few other "yarns" with which I have endeavoured to brighten my otherwise serious pages, may be suppressed if it is thought desirable to shorten the patter. I ought perhaps to apologise for introducing such irrelevant fiction, but I am encouraged in misdoing by the example of the lamented Artemus Ward, who said that the best things in his lecture were generally the things that had nothing to do with it.

[^10]:    ${ }^{1}$ As a further precaution it should be painted flesh-color.

[^11]:    1 Before an American audience the names of any two well-known buildings in New York may be substituted.

[^12]:    1 I am indebted to a clever amateur, Mr. Gordon Powell, for the knowledge of a very simple but effective method of "changing" a wand. The prepared article lies just within the forward rim of an oblong Japanese tray, and at a comvenient moment the unprepared wand just used is laid behind and parallel with it. A little later this is pro-

[^13]:    1 If it is desired to shorten the patter the "Uncle James" episode may be omitted without serious detriment to the trick.

[^14]:    ${ }^{1}$ A description of this trick will be found in The Magician for March, 1914.

[^15]:    1 If preferred the ball instead of being taken openly from the table, may be produced from the wand after the fashion familiar in the Cup and Ball trick, but on the whole I think this is best omitted.

[^16]:    ${ }^{1}$ If the performer does not object to the slight additional trouble, he will find an easy method of obtaining envelopes exactly square and of any desired description of paper, indicated in the chapter entitled "A Few Wrinkles," post.

[^17]:    1 This rigmarole may equally well be used by way of introduction to any other trick of sufficient importance. King George's puzzlement about the dumplings is said to be a matter of history, but, I do not guarantee it as a fact.

[^18]:    ${ }^{1}$ Since this was written Dr. Ellison has passed into the mysterious beyond.

[^19]:    1 This book having been written primarily with a view to British readers, some of my recommendations will naturally be of no value to my American friends, but I have not thought it necessary to delete them. L. H.

[^20]:    ${ }^{1}$ For the information contained in this paragraph, as also that relating to the use of Veneers I am indebted to Mr. Holt Schooling, who is an expert in such matters. My own essays in the direction of fancy cabinet-making have for the most part been limited to rough models to be reproduced in finished shape by more practised hands.

