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## THE

## STRANGE

 AND DANGE. ROVS VOYAGE OFCaptaine Thomas Iames, in his intended Difcouery of the Northweft Paffage into the South Sea.

VVHEREIN
THE MISERIES INDVRED BOTH Going, Wintering, Returning; and the Rarities obferued, both Pbilofophicalland Mathematicall, are elated in this lournall of it.
Publifhed by His Maiesties command.
To which are added, A Plat or Card for the Sayling in thofe Seas.
Diuerslittle Tables of the Author's, of the Variation of the Compaffe, \&cc.

$$
V V I T H .
$$

An Appendix concerning Longitude, by Mafter Henry Gelifbrand Aftronomy Reader of Grefban Colledge in London.

AND
An Aduife concerning the Philofophy of there late Difoueryes, By w. W.

## LONDON,

Printed by Iohn Legatt, for Iohn Partridge. $1633^{\circ}$


## TO THE KINGS MOST

 excellent and SacredMaiestef.

## croff dread Soneraigne,



Ha m my vnskilfull felfe was made choyce of for this imployment, and my vndertaking in it encouraged by Your gracious commandement; I mult elier account of for the greatef honour, that euer yet befell mee. Many a Storme, and Rocke, and Mift, and Wind, and Tyde, and Sea, and Mount of Ice, have I in this Difcouery encountred withall; Many a defpaire and death had, almoft, ouerwhelmed mee; but fill the remembrance of the Accompt that I was to giue of it to fo gracious a Maiefty, put me in heart againe; made mee not to give way to mine owne feares, or the infirmities of humanitie. Your Majeftie in my employment (like a true Father of your Countrey ) intended the good of your Subjects: and who is not bound to bleffe God for your Royall care in it? Had it, now, beene my fortune, to haue done my Countrey this feruice, as to haue brought home the newes of this fuppofed and long fought for Paffage;
then fhould the Merchant haue enjoyed the fwectueffe of the hoped profit, and the Subject haue beene fenfible of the benefit of your Majefties royall intentions in it: I haue done my good willin it:and though not brought home that newes, yet fhall I here divulge thofe obferuations; which may (I hope) become fome way beneficiall vito my Countrey. The Accompt of them, I here, in all humilitie, offer vito your moft Iudicious Majefty. Your gracious acceptance of what I had done, though I had not done what was expected, emboldeneth me to doe fo: and fince your Majeftic was pleafed to fignifie your defires, of hauing a Briefe of my Voyage prefented vnto you: that word became a Command vnto mee, to draw this rude Abfract of it. Your Majeftie will pleafe to confider, That they were rough elements, which I had to doe withall : and will, with fauour, vouchfafe to pardon, if a Sea-mans ftyle be like what he moft conuerfeth with. In the plaineneffe therefore of well-meaning, fince your Majeftie hath beene fo gracious to mee, as to appoint mee your Seruant, I am now bound to vow you my feruice : and it fhall be my honour to be commanded it: and I fhall account no dangers too great, in the going thorow it. Thefeare the refolutions of

## rour Majesties bumbleft Subject

> and Seruant,
$\qquad$


## To my worthy friend and fellow-

 Templar Captaine I A m es . Haue perufed your Iournall. To commend it, were to difpraife it; Good wine needs no Enfigne : Mos eft fæda coloribus abdere: yet this I muft needs fay, you baue fowed your felfe to be a Master of your Art. . The * worth of a Warrier and Pylor is * Miles in acie neuer difcouered but in ftormes and skirmifhes, and probatur $\mathrm{Gu}_{-4}$ how many skirmi/hes of formes and tempefts you haue rempefate dig. paft, this Iournall of yours doth fufficiently nsanifeft: Goe noiciur. on then, and as you haue begun well, fo when any good $\theta$ Gcafion is offered, fecond your good beginnings with futable proceedings : and let not the cold entertaisment you haue had in the frozen Seas frecze rop your affections in wn dertaking other worthy employments. So may you deferue, with Columbus, Drake, and Frobufher, to buse the remembrance of you fmell fweetly in the noitrils of po fteritie, when you are in the duft. Farewell,

From the Inner Temple,


Farewell.


## THE

## PREPARATIONS TO

## THE VOYAGE.

 Auing bin for many yeeres impor. tuned, by my Honorable and wor. Thipfoll friends; to undertake the difcouery of that part of the world, which is commonly called The North-weft Paffage into the South Sea; and fo toproceed to lapan, and toround themorld to the Weftward; Being preft forward withall, by fisnifying to mee the earneft defire the King moft excellent Maiestie had, to be fatisfied therein: I acquainted my much Honoured friends the Merchants of Briftoll therewith: who as ewser they haue bin Benefactors and Adwancers of them that purrue the wayes of Honour: together with the enlargensent and benefit of his Maiesties Kingdomes: did freely offer to bee at the chargcof furnilhing forth bip. ping for this purpofe. And now being thus enabled, I addreft my felfe to the Honourable Sir Thomas Roe, Kinght (as to a learned, and furthest exsployed traneller fented theirs and mine owne voluntary willingneffe, to doe his Maiefties Serwice in thiskinde: who moft graciongly accepted of the offer; and encour aged mee by many fawours in my weake undertakings. Where fore with all Jpeed I contriued in my mind, the befi modell I could; wherby I might effect my de igne. The Adventurers monies were instantby ready, and put into a Treafurexs hand: that there might benowant of prefent pay, for any thing I thought neceffary for the Voyage.

I was euer of the opinion, that this particular action might be better effected by one fhip, than by twa conforted: becaufe in thofe Icie Seas, fo much fubiect to fogs, they might be eafily feparated; I forbeare to peake of ftormes and other accidents: as that a Rendezvous in difcoueries, cassnot furcly, or without much hinderance be appointed: and that Jpeedy per fewerance is the life of fuch a busineffe. Wherefore I refolued to baue but one ship, the Ship-boate, and a shallop.

A great Ship (as by former experience I had found) was unfit to be forc'd thorow the Ice : wherefore I made choice of a well-conditioned, flrong ship, of the burthens of Seuentic Tunne: and in God and that only Sbip, to put the hope of my future fortunes.

The Ship refolued vpon, and that in leffe time then 18. moneths our voyage could not be effccted. I next confidered bow our Ship of feuentic Tuns in bulke and weight might now be proportioned; in victuals, namely, and other neceffaries: thes was all done, as contractedly as we could: and the number of men it would ferwe, at ordinary allowance, for the for ementioned time; was found to be twenty two a finall number to performe fuch a bufinefle, yet double

## The Preparations to the Voyage.

double fufficient to fayle the ship, with prowident carefulneffe.

The Baker, Brewer, Butcher, and others, undertake their Offices upon their credits; knowing it to be a generall ber fine $\int f e$, and their vitter undoing if they fayled in performance, but truly they prooued themfelues Masters in their Arts; and baue my praife for their honeft care : in thene confisting a great part of the performance of the vojage.

The Carpenters goe in hand with the Ship: to make her as ftrong and feruiceable, as posibly in itheir underfandings they could.

Ewery thing being duly proportioned, and my frall number of men knowne; I began to thinke of the quality and abilitie they fhould be of.

Voluntary loyterers I at firft difclaimed, and publifhed I would have all vwnarried, approowed, dble, and bealthy Sea-men: in a few dayes an abundant number prefented themfelues; furnifhed with generall fufficiencie in marine occafions; I fir $f$ t made choice of a Boate-fwayne; and fome to worke with him, for fitting the rigging of the Ship: and as things went forward, fhipt the fubordinate Ctte; and all things being perfectly ready, I fiopt the Mafters mates, and laft of all, the Mafter of wiy Ship, and my Liefetenant. The whole company were firangers to ime, and to each other (as by way of familiaritie) but yet priwately recommended by worthy Merchants, for their abilitie and faithfulne $\iint e$. I was fought to by divers, that badbin in places of the chiefest commsand in this action formerly; and others alfo that had ved the Northerly Icie Seas: but I viterly refufed them all, and would by no meanes haue any with mee that had bin in the like voyage, or aduentures, for fome priwate reafons unnece ffary $A 2$
bere
bere to be related; keeping thus the power in my owne hands I had all the men to acknowledge immediate dependance upon my felfe alone; both for direction and dippofing of all, as well of the Navigation, as all other things what foewer.

In the meane time, the better to ftreng then my former ftidies in this bufineffe, I feeke after lournals, Plots, Difcourfes; or what-euer elfe might belpe my voderfanding.
I eet skilfull workemen to make me Quadrants, Staues, Semicircles, \&rc. as much, namely, as concerne the Fabricke of them : not trufting to their Mechannicke hands, to diuide them; but had them divided by an ingenious practitioner in the Marhematicks. I likewife had Com-paffe-needles made after the moft reafonableft and truest wayes that could be thought on : and by the firft of April, ewery thing was ready to be put together into our hopefull. Ship.

In the meane ppace, I made a Iourney up to London, to know his Maiefties further pleafure; and to make knowne to bim nay readine $\int e$ : who calling for the forementioned Honourable Knight, I ppeedily after receiwed his Maieflies Royall Letters; with directions for proceeding in my voyage, and my difcharge: whereupon I had foort the ship into the Rode, expecting a faire winde to begin the voyage.

## A Voyage for the difcouering a. Paflage to the South Sea.

 HE fecond of CMay, 1631. I tooke my leaue of the Worfhipfull Merchant Aduenturers in this Action, in the Citie of Briffoll: and being accompanied with a Reuerend Diuine, one Mafter T homas Patmer, and diuers of the Merchants, with others of my kindred and natiue Countrey-men; I repairedaboord, Herc Mafter Palmer made a Sermon: exhorting vs to continue brotherly loue amongit vs , and to be bold to profeffe the true Chriftian Religion where-euer we fhould happen, in this our perigrination. After they had receiued fuch entertainment, asmy eftate could affoord them; they departed for Brijfoll. This afternoone, I made reuiew of all things; afwell of clothes, and other neceffaries, as of victuals; and where there was found any want, wee were prefently furnifhed.

The third of May (after Prayer for a prolperous fucceffe to our endeauours ) about three a clocke in the afternoone we came to Sayle: and Stode downe the Channell of Senerne, with little winde, but flowly got forward to the W eftward of Lsudie; and then the winde oppofed it felfe fo ftrongly againft vs, that wee were driuen to beare vp and come to an Anker in Lundie-Rode the fifth in the euening; where we remained vntill the eighth in the morning. Now hoping the winde would fauour vs, wee came to Sayle; but wee were fore'd to put into CMilford: where we came to an Anker A 3.
about mid-night. Here we remained till the feuenteenth in the morning; when with the firf fauouring winde, we proceeded and doubled about Cape Cleere of Ireland. The two and twentieth we were in Latitude $51: 26$, and the Blaskes didbeare of vs North-eaf, about twelue leagues off: which Blaskes is in Lat.52.4. Here I ordred the courfe that fhould bee kept: which was generally Weft North-weft, as the winde would giuel leaue: which in this Courfe and diftance,
Iune 4. is very variable and vinconftant. The fourth of tine we made the land of Groynland: ftanding in with it to bave knowledge of the trending of it; It prooued very thicke foule weather; and the next day, by ewo a clocke in the morning, we found our felues incompaffed about with Ice : and endeauouring to cleere our felues of it ( by reafon we could not fee farre about vs ) we were the more ingaged, and ftrooke many fearefull blowes againft it: At length we made faft to a great piece, (itblowing a very ftome) and with poles wrought day and night to keepe off the Ice; in which labour we broke all our
6. poles. The fixth, about two a clocke in the morning, we were befet with many extraordinary great pieces of Ice, that came vponvs, as it were with wilfull violence: and doubtleffe had erufhed vs to pieces, if we had not let fall fome Sayle which the Ship prefently felt. In fraping that danger, we ran againft another great piece, that we doubted whether our Ship had not bin ftav'd to pieces. But pumping, we found fhemade no water. The former pieces of Ice, had crufhed our Shallop all to pieces; wherefore I caufed our long Boate fpeedily to be had vp from betwixt the Decks, and put ouer Boord: by helpe whereof we againe recouered our broken Shallop; and had her vp on the Decks, intending to new build her. All this day, we did beat, and were beaten fearefully, amongft the Ice; it blowing a very forme. In the cuening, wee were inelofed amongtt great pieces; as high as our Poope : and fome of the tharpeblue corners of them, did reach quite vader v.s. All thefegreat pieces (by reafon it was the out-fide of the Ice) didheaue and fet, and fo beat vs; that it was wonderfull how the Ship could indure one blow of it ; but it was Gods only
preferuation of $v s$, to whom be all honour and glory. In this extremitie, I made the men tolet fall, and make what Sayle they could; and the Ship forced her felfe thorow it : though fo toffed and beaten, as I thinke neuer Ship was. When we were cleere, we fayed the pumps, and found her fanch : vpon which we went inftantly to prayer, and to praife God for his mercifull deliuery of vs.

The fenenth and eighth daycs, we indeauoured to double about Cape Farewell; being fill peftered with much Ice.'

The ninth, we were in Lat. 59, 00. and we made account the Cape Farevell bare of vs duc Eaft, and fome ten leagues off. The Blaskes in Irelard, is in Latt.52.4, and Cape Farewell in Lat. 59.00. The courfe is Weft North-weft : and the diftance about 410 . leagues: I know very well thefe Latitudes, courfes and diftance, doe not exactly agree with Mathematicall conclufions: but thes we fonnd ic by praitice. The variation of the Compaffe in Lat.52.30. and 30. leagues to the Weftward of Ireland, is about 3.00. to the Eaftward; in Lat. 57 . 00. about 3 10. leagues, Weft North-weft, from the Blawkes, the Compaffe doth vary 9.00 , to the Wef-ward: in Lat. 59. 15. fome 40 leagues to the Eaft-ward, of Cape Farewell, the variation is about 14.45 . In this courfe I haue bin obferuant whether there were any Currant that did fet to the N. E. as fome haue written there did, and that as well in Calme weather, as other-wayes: But I could not perceiue any. The windes here are variable; and the Sea of an vnfearchable depth. We haue not.feene from Ireland hitherto, any Whales or other Fifh ; The weather, for the moft part, was foggie and miftie, that wets as bad as raine.

The tenth, all the morning, was very foule weather: and a high-growne Sea : although we had Ice not farre off about vs, and fome pieces, as high as our Top-maft-head. Our long Boate, which we were faine to Towe at Sterne (by reafon we were building our Shallop on our Decks) broke away, and put vs to fome trouble to recouer her againe. This we did, and made meanes to haue her into the Ship, though very much bruifed: and that I had two men fore hurs, and like to be lof in the hauing of her in. By eight a clocke this euening, we were fhor ip as high as Cape Defolation : for finding here the Land to trend away North and by Eaft, we certainly knew it to be the Cape. It flands in Lat. 60.00. and the Land from Cape Faremell to it, trends N. W. the diftance about $40^{\circ}$. leagues. The diftance from Cape Defolation, to the South end of the Iland of Refolution, is about 140 . leagues : the courfe Weft, halfe a point North. The Lat. of the South end of the Iland, being 6r, 20. fome 12. leagues to the Weftward of Cape Defolation, the variation is 16.00. In this courfe, we were much tormented, peftered and beaten with the Ice : many pieces being higher then our Top-malt-head. In our way, we faw many Grampufles amongft the Ice; and it feemeth the Sea is full of them: The weather for the moft part, a t tinking fogge ; and the Sea, very blacke : which I conceilue to be occafioned by reafon of the fogge.
17. The feuenteenthat night, we heard the rutt of the fhoare, as we thought: but it prooued to be the rutt againft a banke of Ice, that lay on the Shoare. It made a hollow and a hideous noyfe, like an ouer-fall of water : which made vs to reafon amongft our felues concerning it : for we were not able to fee aboutvs, itbeing darke night, and foggie. We ftood off from it, till breake of day ; then ir againe : and about 4.2 clocke in the morning wee faw the Land aboue the fogge: which we knew to be the Iland of Refolution. This laft night was fo cold, that all our Rigging and Sayles were frozen. Wee endeanoured to compaffe about the Southern point of the Iland: for that we were fo much peftered with the Ice, and blinded with a very thicke fogge. Here runnes a quicke tyde into the Straight; but the ebbe is as ftrong as the flood; The fogge was of fuch a piercing nature, that it fpoiled all our Compaffes, and made them flagge; and fo heauy withall, that they would not trauerfe. Wherefore I would aduife any, that fhall Sayle this way hereafter, to prouide Compaffes of Muyconia Glaffe, or fome other matter, that will endure the inoifture of the weather. As the fogge cleered vp, we could fee the entrance of the Straight, to beall full of Ice dofe
clofe thronged together. Indeauouring to goe forward, wce were faft inclofed amongft it; and fo droue to and againe with it, finding no ground at 230 . fid. 4. leagues from the shoare.

The twentieth in the morning, we had got about the Southerne point of the Iland; and the winde came vp at Weft, and drone both $v s$ and the Ice vpon the Choare. When we were driuen within two leagues of the Choare, we came amongf the moft ftrangeft whirlings of the Sea, that poffibly can bee concciued; There were diuers great pieces of Iceaground in 40 . fad. water, and the ebbe comming out of the broken grounds of the Iland, amongft thefe Iles of Ice, made fuch a diftractió that we were carryed round: fometimes clofe by the Rocks; fometimes clofe by thofe high pieces : that we were afeard they would fall vpon vs. We were fa beaten likewife with the encountering of the Ice, that we were in a moft defperare eftate: We made faft two great pieces of Ice to our fides, with our Kedger and Grapnels, thatdrew 9. or 10. fad. that fo they might bea-ground before vs, if fo be we were driuen on the fhoare. But that defigne fayled vs: and now from the top fecing in amongt the Rocks, I fent the Boate (for now wee had finifhed her) to fee if fhee could finde fome place of fecuritic : but thee was no fooner parted, but fhee was inclofed, and driuen to hale vp on the Ice, or elfe fhee had beene cruffed to pieces. They ranne her ouer the Ice from piece to piece : and in the meane face, with the whirling and incountring of the Ice, the two pieces brake away from our fides, and carryed away our Kedger and Grapnels: Then we made fignes to the Boate, to make all the hafte fhee could to vs: which Chee perceiuing, did: the men being with much difficultie inforced to hale her ouer many pieces of Ice. In the meane fpace, we made fome Sayle; and got to that piece of Ice, that had our Grapnell on it : which wee againe recouered. By this time, was our Boate come; and We patafreff Crue into her, and fent her to fetch our Kedger: which fhee endeauoured with much danger of Boate and Men. By this time, the Ship was driuen fo
neere the fhoare, that we could fee the Rocks vnder vs and about vs: and we fhould be carryed with the whirlings of the waters, clofe by the points of Rocks, and then round about backe againe : and all this, notwithftanding the Sayle we hadabroad; that wee expected continually when fhee would bebeaten to pieces. In this extremitic, I made them to open more Sayle, and to force her in amongft the Rocks and broken grounds : and where there was many great pieces of Iceaground. We went ouer Rocks, that had but 12. or 13. Foot water on them; and fo let fall an Anker. This Anker hadneuer bin able to winde up the Ship, but that, (by good fortune) the Ship rane againft a great piece of Ice, that was a-ground. This rufh, brake the Mayne knee of her Beake head, and a comer of it: tare away 4 . of our maine Shrouds, and an Anker that we had at the Bowe, faftened into it : and fo ftopt her way, that the did winde vp to het Anker. W ee faw the fharpe Rocks under vs, and about vs; and had but 15 . foot water: being alfo in the fides way, whereall the Ice would driue vpon vs: Our Boate we could not fee; which made vs doubt fhee had bin crufhed to pieces. In her, was the third part of our company: but by and by we faw her come about a point amongft the Rocks. Shee hadrecouered our Kedger; which made vs fomething ioy full ; With all fpeed we laid out Hawfers to the Rocks; and euery one did worke to the beft of his ftrength, to Warp her out of this dangerous place, to the Rocks fides: where wee had 3. fad. water, and were vnder the fhelter of a great piece of Ice that was a-ground, which Chould keepe off the Ice, that otherwife would haue driuen vpon vs. Here wee lay very well all the ebbe; but when the flood came, we were affaulted with pieces of Ice, that euery halfe houre put vs into defpayrable diftreffe. We did worke continually, and extremely, to keepe off the Ice. At full Sea, our great piece of Ice (which was ourbuckler) was afloate; and doe what wee could, got away from vs, and left vs in a mot eminent danger, by reafon of the Ice that droue in vpon vs. But the ebbe being once made, this great piece of I ce came againe a-ground
very fauourable to vs; and fheltered vs all the reft of the ebbe. All night we wrought hard, to thift our Cables and Hawfers; and to make them faft aloft on the Rocks, that the Ice might the better paffe vnder them. All day, and all night, it fnowed hard; and blew a very ftorme at Weft; which droue in all the Ice out of the Sea vpon vs. In working againft the violence of the Ice, the flooke of our Kedger was broken; two armes of our Grapnels, and two Hawfers, our Shallop being againe very much bruifed : whereupon to work we goe on all hands to repaireit.

This tyde, the Harbour was choaked full of Ice; fo that it did feeme firme and vnmooueable: but when the ebbe was made, it did mooue. Some great pieces came a-ground; which did alter the courfe of the other Ice, and putws on the Rocks. Here, notwithftanding all our vttermoft endeauours, fhe fettled vpon a fharpe Rocke ; about a yard aboue the Mayne Maft; and as the water ebbed away, fhe hung after the Head, and heeld to the Offing. We made Cables and Hawfers aloft to her Mafts, and fo to the Rocks; ftraining them tough with our Tackles: but fhee as the water ebbed away, funke ftill; that at length fhee was fo turned ouer, that wee could not ftand in her. Hauing now done all to the beft of our vnderftandings (but to little purpofe) we went all vpona piece of Ice and fell to prayer; befeeching God to be mercifull vnto vs. It wanted yet an houre to low-water : and the tyde did want a foot and a halfe to ebbe, to what it had ebbed the laft tyde. We were carefull obferuers of the low-waters, and had marks by ftones and other things which we had fet vp, fo that we could not be deceiued. The Ship was fo turn'douer, that the Portleffe of the Fore-caftell, was in the water : and we did looke enery minute, when fhee would ouer-fet. Indeed at one time, the Cables gaue way; and fhee funke downe halfe a foot at that flip: but vnexpectedly it began to flow, and fenfibly wee perceiued the water to rife apace; and the Shippe withall. Then was our forrow turned to ioy, and we all fell on our knees, prailing God for hismercy, in fo miraculous a deliucrance.

As foone as fhe was freed from this Rocke, we wroughit hard to get ber further off. All the flood, we were pretty quiet from the Ice: but when the ebbe was made, the Tre came all driuing againe vpon vs; which put vs to a great extremity. We got as many pieces betwixt vs and the Rockes, as we could; to fence vs from the Rockes. There came a great piece vpon our quarter, which was aboue 300 . of my paces about, but it came a-ground. Thus did diuers great pieces befides; which was the occafion, that this tyde the Harbour was quite choakt vp: fo that a man might goe any way ouer it, from fide to fide. When it was three quarters ebbe, thefe great pieces that came a-ground, began to breake with a moft terrible thundering noyfe: which put vs in a great feare, that thofe about vs wouldbreake vs all to pieces. But God preferued vs.
32. This morning the water veer'd to a lower ebbe then the laft tide it had done, by two foote; whereby we faw Gods mercies apparent in our late extremity. That flood, wee had fome refpit from our labours; but after full fea, our hopes ebde too. The great peece that was by vs, fo fopt the Channell, that the Ice came all driuing vpon vs; fo that now, vndoubtedly we thought wee fhould hane loft our Ship: To workethereupon we goe, with axes, barres of iron, and any thing proper for fuch a parpofe; to breake the corners of the Ice, and to make way for it to driue away from vs. It pleafed God to giue good fucceffe to our labours; and we made way for fome, and fended off the reft; and got fo much of the fofter fort of the Ice betwixt vs and the Rockes, that we were in pretty fecurity. Butatlow-water, thofe peeces that were aground, breaking; kept a mof thundering noyfe about vs. This day I weat afhore; and built a great Beacon with ftones vpon the higheft place of the lland; and put a Croffe vpon its, and named this Harbour, The Harbour of Gods Proxidence. In the Euening, the Harbour was fuller of the Ice, then euer it had beene fince we came hither: and the greater peeces grounded, and fopt the reft, that none went out the ebbe, but the Ship lay, as if fhee hadlaine in a bed of Ice.

The

The three and twentieth day in the morning, with the flood, the Ice droue vp among? the broken grounds; and with the ebbe, droue all out (it being then very calme) except one extraordinary great peece: which comming aground not farre from vs, fettled it felfe in fuch a manner, that we much feard him. But there came no more great Ice after him : otherwife, we mult haue expected as great danger, as at any time heretofore. I tooke the boate, and went afhoare vpon the Eafterne fide; to fee if I could finde any place freer from danger then this vnfortunate place: where amongी the Rockes, I difcried a likely place. From the top of the Hill where I was, I could fee the Ship. It was now almof lowe water: at which inflant the forementioned piece of Ico brake with a terrible noyfe into foure pieces: which made me doubffull it had not fpoyled the Ship; it being full halfe maft high. I made what hafte I could to the boate, and fo to the Ship, to be fatisfied: where I found all well, Godbe thanked: for that the Ice had broken from the Ship-ward. I inftantly fent away the boate, to found the way to a Coue that I had found: which was a very dangerous paffage for the boate. At her returne, we vn-mocrd the Ship: and with what fpeede poffible warpt away from amongft this terrible Ice. We were not a mile from them, but they brake all to pieces : and would furely haue made vs beare them company, but that God was more mercifull vnto vs. We got about the Rocks, and fo into this little Coue which. I had fo newly difcouered, Here we made faft to the Rockes; and thought our felues in indifforent fafety: which being done, I went afhoare againe, to wander up and downe, to fee what I could difcouer. I found it all broken Rockie grounds: and not fo much as a tree, herbe, or graffe vpon it: Some Ponds of water there were in it, which were not yet thawed, and therefore not ready for the fowle; We found not in the frow any footing of Deere, or Beares, but Foxes we faw one ortwo.
We found where the Saluages had beene; but it was long fince. They had made fiue hearths; and we found a few firebrands about them; and fome haads of Foxes, and bones of

Foxes; with fome Whale-bones. I could not conceive, to what purpofe they fhould come thither; for we could finde none or very litte wood on the fhoares fide, and no fifh at all; though we did dayly indeauour to take fome. But it may be, the feafon was not yet come. I named this Coue by the Mafters name of my Ship, Prices Cowe. The Latitude of it is 61.24 , the Variation. The firebrands and chips which I fpake of, had beene cut with fome hatchet or other good inftrument of iron: from the top of the hills, we could fee the Ilands that are on the South fhore; and commonly called Sir Thomas Buttons Iles: They did beare South and by Eaft, halfe a point Eafterly:fome 14 .or 15 leagues diftant vpon the change day, it flowes here feuen a clocke and a halfe; and the tyde higheftat moft three fad. The flood comes from the Eaftwards, and thither it returnes. I haue beene obferuant from the top of the hills; whence I might defcry the great pieces of Ice, 2. or 3. leagues from the fhoare, drive to and againe with the flood and ebbe indifferently. Hence I collected that affuredly there is no currant fets in here, but that it is a meere tyde. Neere the fhoare, the eddies whirle into twenty manners; when the ebbe is made: which is, becaufe it comes out of the broken ground amongtt the Ice that is aground neere the fhoare : Befides which reafon, there be diuers Rockes lying vnder water; on which you fhall haue now 30. then 12. and amon but 8. and then 20. fad. And thefe vocertainties, occafion fuch diftractions. I would therefore aduife none to come too ncere thofe dangerous fhoares, for feare hee lofe his fhip, and foby confequence all: The laft night, we tooke better reft then we had done in tente nights before.

And this morning being the 24 , there fprang vp a faire gale of wind at Eaft: and after prayer we vnfaftened our Ship, and came to faile, fteering betwixt great pieces of Ice, that were a-ground in 40 , fad. and twice as high as our top-maft head.

Wee went forth of this Coue, vpont the flood, and had none of thofe whirlings of the waters,as we had at our going
into it. We indeanoured to gaine the North thoare; kept our felues within a league of the fhoare of the Iland of Refolution, where we had fome cleere water to faile thorow. In the Offing, it was all thicke throngd together, as might be poffible. By $\mathbf{3} 2$. a clocke, we were faft inclofed, and notwithftanding it blew very hard at Eaft, yet we could make no way through it : but the hard comers of the Ice did grate vs with that violence, as I verily thought it would haue grated the plankes from the Ships fides. Thus we continued in torment, till the 26. day, driuing to and againe in the Ice; not being able to fee an acre of fea from top-maft head. This 26. was calme Sun-fhine weather; and we tooke the Latitude \& Variation. The Latitude is, the Variation we founded, and had ground at 140 . fad. fmall white fand. I caufed the men to lay out fome fifhing lines; but to no purpofe: for I could not perceiue that baite had beene fo much as touched. The nights are very cold: fo that our rigging freezes : ahd the frefh ponds of water ftand vpon the Ice, aboue halfe as inch thicke.

The 27.there fprung vp a little gale at South-Eaftand the Ice did fomethimg open. Hereupon we let fall our forefayle, and forced the Ship thorow the throng of Ice. In the Euening, the winde came contrary, at WX N . W. and blew hard: which caufed vs to faften to a great piece, to which we remained moord till the 29 .
Iam refolued, that here is no currant : and that by many experiments which Thaue made. Namely, by taking markes on the land; and noting our drift to and againe, with the ebbe and flood, for many dayes together; as well in calme weather, as otherwayes. By all thefe experiments I found exactly, that the tide was no ftronger there, then that betwixt England and France.

This morning, there fprung vp, a fine gale at E, and the Ice did open fomething, fo that we did force the Ship thorow it with her fore-faile. By 12 a clocke, we were gotten into fome open water, withafine gale of wind at Eaft, and fo cleere weather, that we could fee the Iland of Refolution.

The throw the Ice, with variable winds and fogges, and formetimes calme. The 5. at noone, we had a good obferuation, and were in Latitude 63.15. and then wee flaw Salisbury Inland, bearing W. by N. fome 7. leagues off: with much Ice betwixt it and vs: to weather which, we were driven to ftand to the Northward. Scone after, we daw Prince Charles his Cape, andersill Iland: and to the North-north-weft, (and in deed, round about vS ) the Sea mot infinitely peftered with Ice. This did grieue ne very much: for whereas I had determined to profecute a he difcouery to the Northweftward, I aw it was not poffible this yeere. Wee were moreover driuen back againe with contrary wides; fill cloned and petered with Ice: and with all the perils and dangers, incident to fuch adventures: fo that we thought a thoufand times, that the Ship had bin beaten to pieces.

By the fifteenth day of Inly, we were got betwixt Digges Iland and Nottinghams Iland: not being able to get more Northward. There for an houre or two, we had forme open water.

But before I proceed further, it were not amiffe in forme manner to def cribe the Straight, which begins at the Iland of Refolution, and ends here at $D$ igges Iland. If you goe dowie into the Bay, the Straight is about 120. leagues long; and trends W. N. W. and E.S.E. generally. In the entrance, it is about 15 . leagues broad; and then on the Southward fide, is a great Bay. About the midden, it is likewife about 15 . leagues broad: and then the Land opens fomething wider: fo that betwixt Digger land, and Cape Charles, it is about 20. leagues broad. Betwixt which two ftands Satisbtryy Iland, and Nottingham Iland. If it be cleere weather, you may fee both the South and the North fhoares: ordinarily, the depth in the middle of the Straight, is 120 . faddomes, white fard. A certaine tyde runes in it, and no Current: The North Shore, is the ftraighteft, and the cleereft from Ice too. Alongft the North fhoare, you hate many low fall Ilands : which
a Pajfage to the South Sea.
which cannot be feene farre off from the land: and in many places, the land makes as if it had fmall founds into it. The Maine land on both fides, is indifferent high land. And fo much for difcourfe may fuffice : referring you to the Plot for the particulars.

Being now refolued of the impoffibilitie to doe any thing to the North-weftward, for the reafons aforefaid: I gaue order to the Mafter of my Ship to Steere away, W: S. W. to have a fight of Mansfeilds Iland; which the next day by three a clockein the after-noone, we had : hauing had fo much dangerous foule weather amongft the Ice, that we ftrooke more fearefull blowes againt it, then we had euer yet done. This was the firft day that wee went to halfe allowance of bread Flefh dayes: and I ordered things as fparingly as I could. Two of our men complaine likewife of fickeneffe; but foone afterward recouered. In the euening wee came to an Anker : and I fent the Boate afhoare to try the tydes. They brought mee word, that whileft the Boat was afhoare, it flowed about fome three foote : and as wee found by the Ship, and by the Ice; the water at that time came from the W. S. W. and that the higheft tydes (fo farre as they could perceiue) it had not highed aboue two faddome : They found that the Saluages had beene vpon it ; by certaine fires which they found, and heapes of ftones, Tracks of other bealts, but Foxes they could not finde. The winde was fo contrary, and the weather fo foggie; that wee were faine to fpend fome powder to recouer our Boate againe.
Next morning being the 17 . the winde came fomething fanourable: and wee wayed. The fhoare being fomething cleere of Ice (though very thicke all to the Offing ) wee flood alongtt it S. and S. by W. fome 10 . leagues. In the after-noone, the winde came contrary : and we came againe to an Anker, withina mile of the fhoare: for to Sea-boord, was all thicke Ice, and vnpaffable. I went afhoare my felfe, to be refolued of the tyde, and found whileft I was a fhoare, that it did flow two foote : and at that time the flood came from the S. W. by W. I doubted it was an halfe syde; which afterwards I found to be true. I found where the Saluages had beene vpon the Iland; but could: fee little or no drift wood on the fhoare; no beafts on the Iland, nor fifhes in the Sea. It flowes on the change day, about a cleuen a clocke We faw fome fowle on it : of which we killed one, and returned aboord. This Iland is very low land; little higher then a dry fand-banke. It hath Ponds vpon it of frefh water, but no graffe : and is vtterly barren of all goodneffe.
18. The 18 . in the morning, the winde came fomething fauourable; and we weyed and came to Sayle; for the Ice was all comne about ws. We endeatoured to proceed to the W eftward; intending to fall with the W efterne land, about the Latitude 63.00. By twelue a clocke, (hawing beene much peftered) we were comne to a firme range of Ice: but it pleafed God that the winde larged, and wee ftowed away S. S. W. At noone in Lat, 62, 00. by 4, in the euening (hauing feaped dangerous blowes) wee were come (as wee thought ) into an open Sea; and ioy fully ftecerdaway Weft, and W . by N . although that loy was foone quayled. By ten atnight, we heard the rut of the Ice: and it grewa thicke fogge, and very darke with it : neuertheleffe we proceeded, and the neerer we came to it, the more hideous noy fe it made.

By three in the morning, the 19. we were come to it, and as it did clecre a little, we could fee the Ice: which were as thicke rands of Ice, as any we had yet feene. Thefe being vnpaffable,and moreoucr the winde at N. W. we ftowed alongtt it, hoping to weather it to the Southward: but at laft, we became fo blinded with fogge, and fo incompaffed with Ice, that we could goe no further.
20. The 20, in the morning (notwithfanding the fogge) we endeauoured to get to the W eftward; our Ship beating and knocking all this while moft fearefully.
21. In this wilfulneffe we continued till the 21 : when being faft amongft the Ice, I obferued we were in Lat, 60:33, and then looking what dam age our Ship might haue receiured, we could perceiue that below the plate of Iren, which was beSore her Cut-water, fhee was all bruifed and broken: the two knees

## - Pafage to the South Sea.

knees fhe had before, to ftrengthen her, fpoyled and tome: and many other defects, which we could not by any meanes come to mend. Notwithftanding all this, and the extraordinary thicke fogge ( that we could not fee a Piftoll fhot about vs ) we proceeded with the hazzard of all.

Till the 27: which was the firft time we had cleere weather to looke aboutws: The winde withall came vp at South, and the Ice did open fomething: fo that we made fome way thorow it to the Weftward. In the euening, we were faft againe, and could goe no further: the winde veering from the South to the Eaft; and blowing a frefh gale. This occafioned our griefes the more; that with a good winde, wee could not goe forwards putting therefore a Hawfer vpona piece of great Ice, to keepe the Ship clofe to it, we patiently expected for better fortune. Since we came from Mansfeilds Iland, our depth was commonly yio. and roo. fad. oozye ground. Now the water begins to fhowlde : for this prefent 27. driuing faft to and againe in the Ice, we haue but 80 . fad. ground as before.

The 28. and 29 . we were fo fatt inclofed in the Ice, that notwithfanding, we put abroad all the fayle that was at yards; and that it blew a very hard gale of winde; the Ship flirred no more then if fhee had beene in a dry Docke. Hereupon we went all boldly out vpon the Ice, to fort and recreate our felues, letting her ftand ftill, vnder all her Sayles. It was flat, extraordinary large Ice : the worft to deale withall, that we had yer found. I meafured fome pieces: which I found to be 1000 . of my paces long. This was the firft day that our men began to murmure : thinking it impoffible to get either forwards or backe-wards. Seme were of the opinion, that it was all fuch Ice, betwixt vs and the fhoare. Others, that the Bay was all couered ouer : and that it was a doubt whether we could get any way, or to any land, to winter in. The nights were long; and euery night it did fo freeze, that we could net fayle amongit the Ice by night, nor in the thicke foggie weather. I comforted and incouraged them, the beff I could: and to put away thefe cogitations, wee dranke a health to his

Maieftie murmuring was not without reafon; wherefore doubting that we fhould be frozen vp in the Sea : Iordered that fire fhouldbe made but once a day, and that but with a certaine number of fhides, that the Steward fhould deliuer to the Cooke by tale, the better to prolong our fewell whatfoeuer fhould happen.
30.
31.

The 30 . we made fome way thorow the Ice : we heauing the Ship with our fhoulders, and with Mawles and Crowes of Iron, breaking the corners of the Ice, to make way. As we got forwards, the water foalded apace: fo that I belecue it to be fome Iland. At noone we obfervid thorow the fogge, with the Quadrant, vpona piece of Ice : and were in Lat. 58.54. our depth 30. fad. We put out hookes, to try to catch fome fifh, but to no purpofe; for there is not any in this Bay.
31.
eAuguft.

The $3_{1}$. we laboured as aforefaid: and got fomething forward. At noone we were in Lost. 58. 40. our depth:23. fad. It was very thicke hazye weather; or-elfe I thinke we fhould. haue feene the land.

The firft of Auguft, the winde came vp at Weft; which droue vs to the Eaftward : where our depth increafed to 35 . fad. At noone (by obferuation with the Quadrant, on the Ice ) we were in Lat. 58.45. At fixe a clocke this euening, we might perceiue the Ice to heaue and feta little : which was occafioned by a fwelling Sea, that came out of the SouthWeft. This did comfort vs very much: hoping fhortly we fhould get out of the Ice.
2. The fecond, it did blow hard at South-Wef, and yet we could not feele the forementioned fwelling Sea : which did againe quench the hopes we had formerly conceiued.

The third, wee did fee a little open water to the Northweft ward;and did feele a fwelling Sea from the Weft: which doth affure vs, that there is an open Sea to the Weftward. * The fift, we faw the Sea cleere : but could by no meanes worke our felues to it with our fayles: wherefore about fixe
in the euening, weelet fall an Anker in 50 . fad. water; and ftood all with poles and oares to fend off the Ice, and let it paffe to Leewards. We continued this labour all night.

In the norning, the winde came vp at North-W eft, and we wayed with much ioy, as hoping now to get into an open Sea to the Southward. This by noone we had done;and were in Lat. 5 8.28. very free of Ice. The winde did large vpon vs: fo that we ftood away North-Weft,to get vp as high to the Northward as we could : and fo to come coafting to the Southward. We went to prayer, and to gine God thanks for our deliuery out of the Ice.

The ninth, (being in Lat. 59.40.) we came againe to the Ice, which lye very thicke to the North : fince we came out of the Ice, our depth increafed to 110 . and now decreafeth againe: So that I thinke we approched towards the floare.

The tenth prooued very thicke foggie weather; the winde contrary, and the water Chowlding apace, we came to an Ant ker in 22 . Fid.

The eleuenth in the morning, we wayed, and made in for the fhoare; and about noone faw the land: our depth being 16. fad. in Lat. 59.40. The land to the North of vs, did trend North by Eaft, and fo made a point to the Southward, and trended away Weft by South, which we followed : making it for that place, which was formerly called Hubberts Hope. And fo it prooued indeed: but it is now hopeleffe.

Two or three words now, concerning the Bay that we liaue paft ouer. It is from Digges Iland, to this Wefter land (in latitude aforefaid) about 160 . leagues, the courfe Weft South Weft, the variation

The ty des doe fet in the middle of the Bay, Eaft and Weft, as we have often tryed by our ledde aground: but neerer the fhoares, as they are forced by the land; I am of the opinion that in the Ocean, or in large Bayes, the tydes doe naturally fet Eaft and. Weft, and that this doth give little hope of a paff. ge. The greateft depth we had in the Bay, was i 10. fad. and fo fhoaldivg, as you approch to land, we coaited seund a wout this forementioned little Bay; which is fome 18 . leagues

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\mathrm{C}_{3} \text { derpe }
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deepe in 8 , and 6 . fad. and in the bottome of it, we were in two faddome and a halfe water, and faw the firme lanid, almof round about vs. Then we proceeded to the Southward fixe and feuen faddome water; within fight of the breach of the fhoare: kecping the lead continually going, and in the night we would come to an Anker. This night being little winde, we came to an Anker with our Kedger: but in waying of him, we lof him, hating no moreaboord vs.

The 12. We were in Lat. 58.46. fome two leagues from the fhoare. The variation is about 17. deg.
13. The 13 . in the afternoone (it being fomething hazye) we faw fome breaches ahead vs : our depth was 9 , and io. fad. and laffing to cleere our felues of them, we fuddenly ftrooke vpon the Rocks : the Ship then being vnder our two Topfayles, Forefayle and Spreetfayle: with a frefh gale of winde, In this fearefull accident, wee ftrooke all our fayles amaine; and it did pleafe God to fend two or three good fwelling Seas, which did heaue vs ouer the Rocks, into 3 . fad. and prefently into three faddome and a halfe; where we chopt to an Anker : and fayed the pumps : but we found fhee made no water, although fhee had three fuch terrible blowes, that we thought her Maft would haue fhiuered to pieces, and that fhe had bin affuredly bulged. Wee hoyft the Boate ouer-boord, and double man'd her: to goe feeke and found a way, out of this perilous place. Shee was no fooner gone, but there rofe a fogge; fo that we were fainc to fpend fome powder, that Thee might heare whereabouts we were. The winde duld fomething; otherwife, it hadbeene doubtfull whither fhee could cuer haue recouered to vs againe. After thee had beene abfent two houres, fhe brought vs word, that it was all Rocks and breaches, round about vs : and that withall, thee had found a way, where there was not leffe thentwo fad. and a halfe: and that afterwards, the water did deepen. We did prefently way, and follow the Boate, and paft ouer two ledges of Rocks, on which there was farce $\mathbf{~ 4} 4$. foot water. Then it did deepento 3.4 , and fo to 14 . fad. then it fhoulded againe to 9. Tt being now night, we came to an Anker:where

## a Paffage to the South Sea.

we ride indifferent well all the night. In the morning, the winde came contrary; fo that wee could not goe that way we intended to cleere our fclues: and therefore we went to worke; to fit our holds, to fplife our Cables; and made ready two fhot, and fo placed them in the Hold, that they might vpon all occafions runne clecre ; the ends of them being faftned to the maine Maft. We likewife lookt to our Ankers, and fitted our fpare ones. We got out our long Boate from betwixt the decks; which was very much brokenand bruifed. The Carpenter went to worke to fither, ( for I intended to tow the Shallop at Steme) and fo to haue the Boats ready atan infant, either to lay out Ankers, or to be feruiceable to what God fhould be pleafed to try our faith and patience witball : for in him was our only truft, and cur hope vponhis fauour, in our honeft endeauours. At noone, in Lat. 57. 45. wee could fee the land from the N. W. to the S.E by E. with Rocks and breaches: and the Rocks that we came ouer, dry aboue water: whereby I knew it flowes heretwo faddomes at leaf. Atnoone, Ifent the Boate off to fownd to the Eaftward: becaufe the water fhoulded, when we came to an Anker. Shee brought vs word, the fhouldeft water fhe had beene in, was 7 . fad. We intending thereupon to way, the winde came Eafterly: fo that we could not budge: but lay here the 14 , all night, with a fiffe gale of winde.

The is. in the euening, our Cable galded off: by reafon of which perilous and fudden accident, in which wee had not time to put a Buoy to it, we loftour Anker, and were driuen into 4. fad. water, before we could fet our fayles. This when we had done, we ftowed South South-Eaft, the wiade being at Eaft, but the water fhoulded to 3.fad. Then wee ftowed North north-eaft, and it did deepen by degrees to ten fadd. and becaufe it grew darke, we came to an Anker, and rid a good ftreffe all night.

In the moming the I6. the winde came vp at North a frefh gale: and we wayed and came to fayle. By nine a clocke, it grew to be a very ftorme: and we turned to and againe, in $\$ 0 . \mathrm{fad}$, water. In the evening, the winde duld: and wee frowed
ftood South-weit, to haue a fight of Port Nelfon: which courfe we ftood all night,by the Starres, being in Lat. 57. 25. the variation, about 17 . degrees.

The 17 . in the moraing, we food South: and our depth decreafed by degrees to 8. faddomes. At noone we had good obferuation: being in Latitude 57.15 . and wee make account, that we are fome 6 .or 7 . leagues of the Southerne fide of Port Nelfon. Here the colour of the water changed : and was of a puddlelifh and fandy red colour. We food into 6 . fad. and could not fee the land from Top-maft-head: fo night comming on, and itbegiming to blow hard at Eaft by South, we ftood off againe into 10 . and 12. faddomes: where the water was againe of the colour of the Sca.

The 18. as the winde and weather fauoured vs, and the ftorme was broken vp: we ftood in againe South, and came againe into thicke puddlelifh water: into 8.7.and 6 . fad. and then off againe : for that it grew thicke foggie weather: keeping our lead continually going, night and day.

The 19 . being fine cleere Sun-fhine weather; we ftood in againe into the thicke puddleifh water, into 8. fad. where we came to an Anker, to try the tydes : For that from Top-mafthead, we could not now fee the land. We were at noone (by good obferuation ) in Latitude 57.20. and the tydedid fet N. W. by W. and S. E. by E. It did runne two knols and a halfe in two glaffes; Irefolued, that this was nothing but fhoalds to the land. In the after-noone it began to fnuffle and blow ; fo that we had much adoe to get vp our Anker. This being done, we ftood Eaft South Eaft : but the water fhoalded apace. Then we ftood Eaft, and it deepened a little: In the euening, the winde came vp at Weft ; and then we ftood Eaft South-eaft, into 10 . and 8, and afterwards South-Eaft, as our depth did guide vs by our lead, and the colour of the water into 7 . and 6 . faddomes.
20.

The 20, at 6. in the morning, we faw the land: it being a very low flat land. Wee ftood into 5 , faddomes, to make it the better : and fo ftood alongft it. At noone wee were in lat. 57.00. We named it, $T$ he new Principality of South Wales;
and drank a health in the beft liquor we had to Prince Charles his Highneffe, whom God preferue. We ftood alongt it; and came to a point where it trends to the Southward : neere to which point, therc are two fmall Ilands. In the eueniug it was calme, and we came to an Anker. The tyde fet as aforefaid. There we rid all that night, and the next day : by reafon the winde was contrary. There wenta chopping fhort Sea : and the Ship did labour at it, exceedingly leaping in Spreet-fayle yard, Forecaftell, and all : for as yet we had not trimmed her well, toride. About nine at night, it was very darke : and it did blow hard. Wee did perceive by the lead the Ship did driue, wherefore bringing the Cable to Capflang, to heaue in our Cable (for we did thinke we had loft our Anker ) the Anker hitchtagaine, and vpon the chopping of a Sea, threw the men from the Capftang. A fmall rope in the darke, had gotten foule about the Cable, and about the Mafters legge too: but with helpe of God hee did clecre himfelfe, though not without fore bruifing. The two Mates were hurt; the one in the head; the other in the arme. One of our luftieft men, was ftrooken on the breft with a bar, that he lay fprawling for life: another had his head betwixt the Cable ; and hardly efcaped. The reft were flung, where they were fore bruifed: But our Gunner (an honeft and a diligent man ) had his legge taken betwixt the Cable and the Capftang: which wrung off his foote, and tare all the flefh off his legge, and crufhed the bone to pieces, and forely withall bruifed all his whole body: in which miferable manner hee remained crying till we had recouered our felues, our memory and ftrengths to clecre him. Whileft we were putting him and the reft downe to the Chirurgion; the Ship droue into fhoalde water; which put vs all in feare: we being fo forely weakened by this blow, which had hurt cight of our men. It pleafed God, that the Anker held againe: and Thee rid it out all night. By midnight, the Chirurgion had taken off the Gunners leggeat the gartering place; and dreft the others that were hurt and bruifed : after which we comforted each other as well as we could.

The 22. wee weyed; and ftood a little off into deeper water; expecting a better winde. Which in the afternoone fauoured vs. Wee ftood in againe for the fhoare,and along ft it wee proceeded. It is very fhoald about foure leagues off, and full of breaches.
33. The 23. at noone, we were in latitude 56:28. In the enening, the winde came contrary : and we were faine to turne to and againe. All this moneth, the winde hath beene very variable, and continued not long vpon one point : yet it happened fo, that we can get but little forward.
26. The 26 . there fprung vp a fine gale at Weft, but very thicke weather : neuertheleffe wee ftood into 7 . and 6 . fad. the water very thicke and puddlelifh. At noone, it cleered; and we could fee that we were imbayed in a little Bay : the land being almoft round about vs. We ftood out of it, and fo alongft it, in fight ; till the 27 . in the morning: when we came to higher land then any we had yet feene, fince we came from Nottingham Iland. We food into it, and came to an Anker in 5 . faddome. I fent off the Boate, well man'd and arm'd; with order in writing what they were to doe: and a charge to returne againe, before Sunne-fet : The euening came, and no newes of our Boate: we fhot and made falie fires; but had no anfwer: which did much perplex vs,doub. ting that there had fome diftafter befalne her, through carelefneffe, and in her we fhould lofe all. Wee aboord, at prefent, were not able to wey our Anker, nor fayle the Ship. At laft we faw a fire vpon the fhoare; which made vs the more doubtfull, becaufe they did not anfwer our fhot,nor falfe fires with the like. Wee thought withall, that it had beene the Saluages, who didnow triumph in their conqueft. At length they came, all fafe and well : and excufed themfelues, in that vpon their comming afhoare, it did ebbe fo fuddenly, that a banke of fand was fo prefently dry without them, as they could not come away, till that was couered againe: and with that they pacified mee: They reported, that there was great ftore of drift wood, on the fhoare : and a good quantitie growing on the land. That they faw the tracks of Deere and

Beares : good fore of Fowle; (of which they had killed fome ) but no figne of people. That they paft ouer two little riuers, and came to a third; which they could not paffe: That it did flow very neere three faddomes, fometimes; as appeared by the Thoare. That it was low water at foure a clocke ; that the flood came from the North-weft : and that it flowed halfe tyde; which both they and we had perceived by the Ship. At low water, we had but three faddome, where we did ride. The winde began to blow hard at Eaft, whereupon we weyed and ftood to the Northward till midnight : Thenin againe; and in the morning wee faw the land: and then it began to blow hard, and as we ftood off, it increafed to a very forme; fo that at length wee could not maintaine a payre of courfes; but tryed vnder our Maine courfe, all day and all night: fometime turning her head, to the Landward : fometime to the Offing.

The 29 . in the morning, we made account we had drouen backe againe, fome 16 . or 18 . leagues: and in the morning (as it clecred) wee faw a Ship to Leeward of vs fome three or foureleagues: fo wee made fayle and bore yp with herShee was then at an Anker in 13. fadd. It was his Maiefties Ship, and Captaine Foxe commanded in her.

I faluted him according to the manner of the Sea, and receiued the like of him. So I tood in to fee the land, and thought to tacke about, and keepe weather of him, and to fend my Boataboord of him : but the winde fhifted, fo that for that time I could not. In the eueving, I came to weather of him, and fentmy Boat aboord of him; who prefently weighed, and ftood off with mee till midnight : and then we frood in againe.

In the morning Captaine Foxe and his friends, came aboord of mee : where I entertained them in the beft manner I could: and with fuch frefh meat as I had gotten from the fhoare ; I told him, how I had named the land, The South Principality of w ales. I Thewed him how farre I had beene to the Eattward: where I had landed ; and in briefe, I made knowne to him, all the dangers of this Coaft, as farre as I had beene.

He told mee, how himfelfe had beene in Port Nelfon : and had made buta Curfory difcouery hitherto: and that he had not beene aland; nor had not many times feene the land. In the euening, after I had giuen his men fome neceffaries, with Tobacco and other things which they wanted: hee departed aboord his Ship: and the next morning, ftood away South South-weft: fince which time, Incuer faw him. The winde fomething fanouring mee, Iftood in for the fhoare; and fo proceeded alongit it, in fight.

This moneth of Auguf ended with Snow and Haile ; the weather being as cold, as at any time I haue felt in England.
Sepiember 1. it cleered; in fight of land. At length the water fhoalded to 6. and 5. fadd. and as it cleered, we faw it all breaches to Leeward: fo we hull'd off, North North-eaft, but ftill raifed land. By night, we had much adoe to get fafely out of this dangerous Bay. At midnight, the winde came vp at South, and fo we tooke in our fayles, and let the Ship drite to the Northward into deeper water. This day, was the firft time, the Chirurgion told mee, that there were diuers of the men tainted with fickneffe. Atnoone, we were in latitude 55.12.
2. The fecond, we food in againe for the fhoare; but as we came in to fhoald water, it began to blow: the weather being winterly and foule; threatning a ftorme : wherein we were not deceiued, forthat in ftanding off, wee had a violent one.
3. By midnight it broke vp; and the third in the morning, wee ftood in againe: and by a Ir. wee faw it. Here wee found the land to trend South Sonth-eaft and South: fo that we knew, we were at a Cape Land: and named ic Cape Henrietto Maris: by her Maiefties name; Who had before named our Ship. At noone, we were inlatitude 55.05 . and that is the height of the Cape.

From Port Nelfon to this Cape, the land trends (generally) Eaft South-eaft, but makes with points and Bayes: which in the particulars doth alter it a point, two or three. The diftance is about one hundred and thirtie leagues : the variation at this Cape taken by Amplitude, is about fixteene degrees.

A moft fhoald and perilous coaft : in which there is not one Harbour to be found.

The third day in the afternoone, we had a tearing ftorme at North; which continued till midnight, in extreme violence.

The fourth in the morning (the forme being brokevp) we ftood in againe, Sourth-Weft. The weather was very thicke, and we founded continually : but by noone itcleered and we faw the land. Here it did trend South by Eaft, and the tydes did fet alongft it, with a quicke motion. In the euening, there came a great rowling Sea out of the North North-eaft, and by eight a clocke, it blew very hard at South-eaft, and by reafon of the incounter of the winde and this great Sea: the Sea was all in a breach; and to make vp a perfect tempeft, it did fo lighten, fnow, raine, and blow, all the night long, that I was neuer in the like: We fhipt many Seas; but one moft dangerous: which rackt vs fore and aft: that I verily thought it had funke the Ship:It ftrooke her with fuch a violence. The Ship did labour moft terribly in this diftraction of winde and waules: and we had much adoe to keepe all things faft in the hold, and betwixt decks.

The fift in the morning, the winde fhifted South-Weft, but changed not his condition; but continued in his old anger and fury. In the afternoone, it fhifted againe to the Northweft, and there fhowed his vttermoft malice; and in that tearing violence, that nor I, nor any that were then with mee, ener faw the Sea in fuch abreach. Our Ship was fo tormented, and did fo labour ; with taking it in on both fides, and at both ends: that we were in a mof miferable diftreffe, in this fo vaknowne a place. At eight a clocke in the euening, the ftorme brake vp: and we had fome quietneffe in the night following: not one hauing flept one winke in 30 . houres before. If this ftorme had continued Eafterly, as it was at firft, without Gods goodneffe we had all perifhed.

The fixt, the winde was at South-weft, fo that wee could do no good to the Weftward. We fpent the time therefore, in trimming of our Ship: we broughtall our coales (which for the moft part was great Coale) aft: as we alfo did fome
other things; and all to lighten her afore. Others did picke our bread; whereof there was much wet : for doe what we could, we fhipt abundance of water betwixt decks : which ranne into the hold, and into our bread-roome: for the Sea, indeed, fo continually ouer-rackt vs, that we were like Ionas in the Whales belly: We ouer-looked our Tacks and Shoots, with other Riggings of ftreffe: becaufe that henceforward, we were to looke for no otherbut W inter weather: This euening our Boate-fwayne (a painefull man, and one that had laboured extremely thefe two or three dayes) was very ficke: fwouning away three or foure times: infomuch that wee thought verily, he would prefently haue dyed.
7.

The feuenth in the morning, the winde came vp at Southcaft, and we ftood away South-weft, vnder all the fayle we could make. In this courfe, we faw an Hand and came clofe aboord it: and had twentie fadd. water, which was fome comfort to vs : for hitherto, we could not come within foure or fueleagues of the Choare, at that depth. This Iland ftands in 54. 10. The afternoone, we ftood away South-weft, and in the cuening, had the fhoalding of the Wefterne fhoare, in 10. 8. and 7. fadd. but it was fo thicke, that we could not fee the land. It is about 14 . leagues, betwixt this Iland and the Maine.

The eight was thicke, foggie, and calme : which fo continued till the ninthabout fixe in the morning. The winde then comming vpat South South-weft : (though very foggy) we flood to the Eaftward : keeping our lead going continually. In the euening, the water thoalded to io. and 9. fadd: wherefore we food off and on, all night.
10. The tenth we made it: finding itan Iland, of about 8 . or 9. leagues long. It ftands, in latitude 53. 5. and about i5. leagues from the Wefterne fhoare. The part of it, that we coafted, trends Weft North-weft : I named it my Lord weftons Iland; We ftood ftill away to the Eaftward: it being broken foggie weather. In che afternoone, we difcryed land to the Eaftward of vs: which made like three hils, or hummockes: Towards them we fayle; keeping our lead ftill going;
and very circumfpect. At length wee alfo faw land to the Southward of vs: whereupon we loofe vp, and now make for that : by courfe as we had fet it in the thicke darke fogge. We came in amongtt fuch low broken grounds, breaches, and rockes; that we knew not which way to turne vs : but God be thanked it was but little winde; and fowe came to an Anker; Soone after it cleered; at which time we could fee nothing but fands, rocks, and breaches, round about vs: that way onely excepted, which we came in. I fent prefently the Boate to found amongit the fhoalds and rocks: that if wee fhould be put to extremitie, we might haue fome knowledge which way to goe. This night prooued calne and faire weather : and we rid quietly.

The eleuenth in the morning, I went in the Boate afhoare my felfe : and whilft I was a land, I fent the Boate about amongft the broken grounds, to found. I found this Iland, vtterly barren of allgoodneffe : yea of that which I thought eafily to haue found: which was Scuruy-graffe, Sorrell, or fome herbe or other, to haue refrefhed our ficke people. I could not perceiue that the ryde did flow here (ordinarily) aboue two foot. There was much drift wood on the fhore:and fome of it droue vpvery high, on the North fide of the Iland: whereby I iudged that the formes were very great at North, in the W inter. Thus I returned aboord; and fent many of our ficke men to another part of the Iland, to fee if they themfelues could fortunately finde any reliefe for their griefes. At noone, by good obferuation, we were in latitude $5^{2,45}$. In the euening, our men returned comfortleffe: and then we weyed and ftood to the Weftward, comming to an Aaker vinder another Iland, in 20 . faddomes.

The twelfth in the morning, it began to blow hard at South-eaft, which was partly of the fhoare ; and the Ship began to driue : it being foft oozie ground. We heaued in our Anker thereupon, and came to fayle vider two courfes. Whileft the moft were bufie in heauing out of Top-fayles : fome, that fhould haue had fpeciall care of the Ship ranneher athoare vpon the rocks: out of meere carelefneffe, in looking

## A Vojaige for the difcouering

out and about or heaving of the leade, after they had feene the land all night long, and mought euen then haue feene it, if they had not beene blinded with felfe conceit, and beene enuioufly oppofite in opinions. The firft blow, ftroke me out of a dead fleepe, and I running out of my Cabbin; thought no other at firf, but I had beene wakened (when I faw our danger) to prouide my felfe for another IW orld.

After I had contrould a little paffion in my felfe, and had checkt fome bad counfell that was giuen me, to reuenge my felfe vpon thofe that had committed this crror: I ordered what fhould be done to get off thefe Rockes and ftones. Firft we halde all our fayle abacke-flayles; but that did no good, but make herbeate the harder. Whereupon we ftrooke all our fayles amaine ; and furdeld them vp clofe, tearing downe our fterne, to bring the Cable thorow the Cabbin to Capftang: and folaid out an Anker to heaue her afterne. I madeall the water in hold te be ftau'd: and fet fome to the pumpes to pumpe it out, and did intend to doe the like with our Beere; Others I putto throw out all our Coales: which was foone and readily done. We quoyld out our Cables into our long boate; all this while, the Ship beating fo fearefully, that we faw fome of the fheathing fwim by vs. Then ftood wee, as many as we could, to the Capptang: and heaued with fuch a good will, that the Cable brake, and we loft our Anker. Oat, with all fpeede, therefore, we put another: Wee could not now perceiue whether fhe did leake orno; and that by reafon we were imployed in pumping out the water, which we had bulged in hold: though we much doubted, that fhe had receiued her deaths wound : wherefore we put into the Boate the Carpenters tooles, a barrell of bread, a barrell of powder, fixe muskets, with fome match; and a tin-der-boxe, fifh, hookes and lines, pitch and okum: and to be breefe, what-euer could be thought on in fuch an extremity. All this we fent afhoare, to prolong a miferable life for a few dayes. We were fuc houres thus beating; in which time fhe ftrooke 100 . blowes: infomuch that we thought cuery ftroke had bin the laft that it was poffible the could
haue endured. The water, we could not perceive in all this time, to flowe any thing at all: at length, it pleafed God, the beatouer all the Rockes: though yet wee knew not whether fhe were flanch. Whereupon, to pumping we goe on all hands, till we made the pumpes fucke: and then we faw how much water fhe did make in a glaffe. VVe found her to be very leakie; but wee went to prayer and gaue God thankes it was no worfe: and fo fitted all thingsagaine, and got further off and came to an Anker. In the Euening, it began toblow very hard at W. S. W. which if it had done whileft we were on the Rockes, we had loft our Ship without any redemption. With much adoe, we wayde our Anker, and let her driue to the Eaftward amongft the broken grounds and Rockes: the boate going before, founding. At length, we came amongtt breaches; and the boate made fignes to vs that there was no going further. Amongtt the Rockes therefore we againe came to an Anker, where we did ride all night: and where our men which were tyred out with extremelabour, were indifferent well refrefhed. Here I firft noted, that when the wind was at S. it flowed very little or no water at all ; fo that we could not bring our Ship aground to looke to her: for we did pumpe almoft continually.

The 13. at noone we wayed, and food to the Weftward: but in that courfe, it was all broken grounds, fhoaldes and funken Rockes: fo that we wondered with our felues, how we came in amongft them in a thicke fogge. Then we fhapte our courfe to the North-ward : and after fome confultation with my affociates, I refolued to get about this land, and fo to goe downe into the bottome of Hud/ons Baye; and fee if I could difcouer a way into the Riuer of Canada: and if I failed of that, then to winter on the maine Land; where there is more comfort tobe expeeted, thell among Rockes or Ilands. We ftood alongft the fhoare, in fight of many breaches. When it was night, we ftood vnder our fore-fayle; the leade ftill going. At laft, the water fhoalded vpon vs, to 10. fad. and it began to blow hard. We tackte about, and it did deepen to 12 , and 14 , fad. but by and by, it fhoalded againe
to 8. fad. Then we tackt about againe; and fuddenly it fhoalded to 6 . and 5 . fad. fo wee ftrooke our fayle amaine, and chopt to an anker: refoluing to ride it out for life and death. We ridde all night a great ftreffe; fo that our bittes did rife, and we thought they would haue beene torne to pieces.

At breake of day the 14 . we were ioyfull men: and when we could looke about, we difcricd an Iland fome 2 . leagues off, at W. by N. and this was the fhoald that lay about it. Here did runne a diftracted, but yet a very quicke Tyde : of which we taking the opportunity, got vp our Anker, and ftood N. W. to clecre our felues of this fhoald. In the afternoone, the wind came vp at N. E. and we food alongft the Eafterne fhoare in fight of a multitude of breaches. In the Euening, it began to blow a forme not fayle-worthy; and the rea went very high, and was all in a breach. Oar fhallop, which we did now towe at fterne, being moord with two hawfers, was funken : and did fpine by her moorings, with her keele vp, 20. times in an houre. This made our fhip to hull very broad; fo that the fea, did continually oner-rake vs: yet we indured it, and thought to recouer her. All night, the forme continued with violence, and with fome raine in the morning : it then being very thicke weather. The water fhoalded apace ; with fuch an ouer-growne fea withall, that a fayle was not to be endured: and what was as ill, there was no truiting to an Anker. Now therefore began we to prepare our felues, how to make a good end, of a miferable tormented life. Aboutnoone as it cleered vp, we faw two Ilands vider our lee; whereupon we bare vp to them : and feeing an opening betwixtthem, we indeauoured to get into it before night : for that there was no hope of $v s$, if we continued out at fea, that night. Therefore come life, come death, we muft runne this hazzard. We found it to be a good found : where we ridde all night fafely, and reconered our ftrengths againe, which were much impared with continuall labour. But béfore we could get into this good place, our fhallop broke away (being moord with 2 . hawfers) and we loft her to our great griefe: Thus now had we but the Ship boate,

> a Paffage to the South Sea.
and fhe was all torne and bruifed too. This Iland was the fame that we had formerly coafted the Wefter fide of; and had named my Lord wefons Itand. Here we remained till the 19 . in which time it did nothing but fnow and blow extremely, infomuch that we darft not put our boate ouerboord.

This 19. The wind fhifted N.N.E. and we wayde and ftood to the Southward: but by noone the wind came vp at S, and fo we came to an Anker vnder another Iland, on which I went afhoare, and named it The Earle of Brifols Mand. The Carpenter wrought hard in repairing our boate: whileft I wandered vp and downe on this defart Iland, I could not perceiue, that ener there had beene any Saluages on it : and in breefe, wę could finde neither Fifh, Fowle, nor Hearbe vpon it;fo that I returned comfortleffe aboord againe. The tydes doe high about fome 6. Foot: now that the wind is Northerly. The flood comes from the North: and it doth flow halfe tyde ; The full fea this day, was at one a clocke. Here, feeing the windes continue fo Northerly, that we could not get about to goe into Hudfons Baye; we confidered againe what was beft to doe, to looke out for a wintering place. Some aduifed me to goe for Port Nelfon: becaufe we were certaine that there was a Coue, where we might bring in our Ship. Hikte not that counfell; for that it is a moft perilous place, and that it might be fo long ere we could get thither, that we might be debard by the Ice. Moreouer, feeing it was fo cold here, as that euery night our rigging did freeze: and that fometimes in the Morning, we did fhouell away the fnow halfe a foote thicke off our deckes : and in that Latitude too: I thought it farre worfe in the other place. I refolued thereupon, to fland againe to the Southward, there to looke for fome little Crecke or Coue for our Ship.

The 21 . the winde camevp at N . and we wayde: although it was a very thicke fogge, and food away S. W. to cleere our felues of the fhoalds that were on the point of this Iland. This Iland is in Lat. 53. 10. When we were cleere, we fteerd ${ }^{2}$ way S. At noone the fogge turned into raine : but very
thicke weather; and it did thunderall the afternoone: which made vs doubta ftorme: for all which, wee aduentured to proceed. In the euening, the winde increaled; and blew hard: wherefore we tooke in all our fayles, and let herdriue to the Southward, heauing the lead cuery glaffe. Oar depth,whers we tooke in our fayles, was 30 . fadd. and it did increafe to 45. which was a great, comfort to vs in the darke: At midnight, our depth began fuddenly to decreafe; and as faft as the lead could be heaued, it fhoalded to 20, fadd. wherefore we choptto an Anker and trimmed our Ship aff, to mount on the Sea, and fitted all things to ride it out. There was no need to bid our men watch; not one of them put his eyes together all the night long. We rid it out well all the night : although the Sea went very loftie : and that it did blow very hard.

The 22 . in the morning, when we could looke about vs; we faw an Iland vnder our Lee fome leaguc off: all being thoalds and breaches, betwixt vs and it. At noone (with the helpe of the windward tyde) we attempted to haue vp our Anker: although the Sea ftill went very loftie. Ioyning all our ftrengths therefore, with our beft skils; God be thanked, we had it vp: but before we could fet our fayles, wee were driuen into nine fadd. Indeauouring thereupon to double a point, to get vnder the Lee of this Iland; the water fhoalded to 7. 6 . and 5 . fadd. but when we were about, it did deepen againe and we come to an Anker in a very good place; And it was very good for vs, that we did: for the winde increafed to a very forme. Here wee rid well all the night, tooke good reft, and recouered our fpent ftrengths againe. The laft night and this morning, it did fnow and hayle, and was very cold: neuertheleffe I tooke the Boate and went afhoare tolooke for fome Creeke or Coue to have in our Ship; for fhee was very leaky:and the company becomne fickly and weake, with much pumping and extreme labour. This Iland when wee came to the fhoare ; it was mothing but ledges of rocks, and bankes of fand: and there went a very great furfe onthem. Neuertheleffe I made them rowe thorow it; and afhoare I got with two more, and made them rowe off without the breaches:
breaches; and there to come to an Anker and to ftay for mee: I made what fpeed I could to the top of a hill, to difcouer about : but could not fee what we looked for: Thus becaufe it began to blow hard, I made hafte towards the Boate againe. I found that it had ebbed fo low, that the Boate could not by any meanes come neere the fhoare for mee: fo that we were faine to wade thorow the furfe and breaches to hersin which, fome tooke fuch a cold, that they did complaine of it to their dying day. But now it began to blow hard, fo that we could not get but little to windward toward our Ship: for the wind was fhifted fince we went afhoare, \& return to the fhoare, we could not, by reafon of the furfe. Well:we row for life, they in the Ship, let out a Buoy by a long warpe; \&z by Gods affiftance we got to it:and fo haled vp to the Ship; where we were well welcom'd, \& we all reioyc'd together. This was a premonition to vs ; to be carefull how we fent off the Boate; for that it was winter weather already. Inamed this Iland, $\operatorname{Sir} T$ homas Roes Iland: It is full of fmall wood; bur in other benefits not very rich : and ftands in latitude 52. 10. At noone, we weyed: feeing an Iland that bare South South-ealt of vs, fome foure leagues off; which was the higheft land we had yet feene in this Bay: but as we came neere it, it fuddenly fhoalded to 6 . 5 . and 4.fadd. Wherefore we ftrooke our fayles amaine, and chopt to an Anker: but it was very foule ground, and when the Ship was winded vp, we had butthree fadd. at her Sterne, As it cleered, we could fee the breaches all alongft vnder our Lee: holding it fafe therefore to ftay long here; we fettled enery thing in order, for the Ship to fall the right way. We had vp our Anker, got into deeper water ; and ftood ouer againe for Sir Thomas Roes Iland: which by night we brought in the winde of vs ; fome two leagues off-: which did well fhelter ys. The tydes runne very quicke here amongft thefe fhoalds; and their times of running ebbe, or flood, be very vncertaine: Their currants, are likewife fo diftracted, that in the night there is no fayling by the Compaffe: wherefore we were faine to feeke euery night fome new place of fecuritie to come to an Anker.

The 24. in the morning, it did lower, and threaten a forme: which made vs with the windward tyde, wey to get neerer vader the Iland. It was very thicke foggie weather: and as we ftood to the North-eaftward, we came to very vncertaine depths : at one caft, 20. fadd, the next 7. then $10.5 \cdot 8$. and 3 . and comming to the other tacke, we were worfe then we were before, the Currants making a foole of our beft iudgements, in the thicke fogge when we could fee no land-marks. It pleafed God, that we got cleere of them : and endeauoured to get vnder the Lee of the Iland. This being not able to doe, wee were faine to come to an Anker in 35 . fadd. fome two leagues off the fhoare: All this afternoone (and indeed all night too ) it did fnow and hayle : and was, very cold.

The 25 . Wee weyed, and thought to get to the Eaftward: but as wree tacke to and againe, the winde fhifted fo in our teeths, that it put vs within a quarter of a mile of the very Shoare: where we chopt to an Anker and rid it out for life and death. Such miferies as thefe, we indured amongft thefe fhoalds and broken grounds: or rather more defperate then I have related: (very vnpleafant perchance to be read) with fnow, haile, and ftormy weather, and colder then euer I felt it in England in my life. Our fhoote-Anker was downe twice or thrice a day: which extreme paines made a great part of the company fickly. All this lafted with vs, vntill the 30 . of this moneth of September: which we thought would haue put an end to our miferies : for now we were driuen amongft rocks, fhoalds, ouer-falles, and breaches round about vs ; thar which way to turne, we knew not; but there ride amongft them, in extremitie of diffreffe. All thefe perils,made a moft hideous and terrible noyfe, in the night feafon : and I hope it will not be accotnted ridiculous, if I relate with what meditations I was affected, now and then, amongft my ordinary prayers : which I here affoord the Reader, as I there conceiucd them; in thefe few ragged and teared Rimes.

OH, my poore foule, why doeft thou gricue to fee So many Deaths mufter to murther mee? Looke to thy felfe, regard not mee ; for I Muft doe (for what I came) performe, or dic. So thou may ft free thy feife from being in A dung-hill dangeon; A meere finke of finne And happily be free'd, if thou beleene, Truly in God through Chrif, and ener liue.
Be therefore glad yet : ere thou goe from hence, For our ioynt finnes, let's doe fome penitence, Vnfainedly together. When we part, Ile wifh the Angels Ioy, with all my heart. We haue with confidence relyde vpon A ruftie wyre, toucht with a little Stone, Incompaft round with paper, and alaffe To houfe it harmeleffe, nothing buta glaffe, And thought to fhun a thoufand dangers, by Theblind direction of this fenfeleffe flye. When the fierce winds fhatter'd blacke nights afunder, Whofe pitchie clouds, fpitting forth fire and thunder,
Hath fhooke the earth, and made the Ocean roare ; And runne to hide it, in the broken fhoare : Now thou muft Steere by faith; a better guide, Twill bring thee fafe to heauen againft the tyde Of Satans malice. Now let quiet gales
of fauing grace, infpire thy zealous fayles: with a windward tyde, out went our Boate, to found a channell to help vs out of this perilous place. The Boat, within two houres fhee returned: and told vs, how fhee had beene away. where there was not leffe then 12 . fadd. We prefently, thereupon weyed; but found it otherwife : and came amongt many ftrange races, and ouer-falles, vpon which there went a very great and breaking Sea: As we proceeded, the water Choaldedto 6 . fadd. Well ! there was no remedy, we muft goe forward: happybe luckie; feeing there neither was any riding; and as little hope to turne any way with a fayle, but that there appeared prefent death in it. It pleafed Godfo to direct vs , that we gotthorow it : hauing no leffe then fiue fenerall, andall very vacertaine depths. The water, fometimes deepened to 20 . fadd. then vpona fudden, it fhoalded to 7.6 . and 5 . faddomes: fo weftrooke all our fayles amaine, and chopt to an Anker, where wee rid till midnight, for life and death: it blowing a mercileffe gale of winde, and the Sea going very loftie, and all in a breach. The ground was foule ground too, infomuch that wee doubted our Cable, cuery minute.
2. The fecond in the morning was little winde : wherefore taking the opportunitic of the tyde, the Boate went forth to found : which returning againe in two houres, told vs how they had founded about that fhoald, and had found a place of fome fafetie to ride in; and had beene in noleffe water then fiue faddome. We weyed; and found our Cable galled in two places: which had foone failed vs, if the foule weather had continued. We ftood the fame way, that the Boat did direct vs : but it prooued fo calme, that wee came to an Anker in 18. faddome. Itooke the Boate, and went afhoare on an Iland, that was to the Southward of vs: which I named, The Earle of Dambyes Iland: From the higheft place in it, I could fee it all broken grounds and fhoalds, to the Southward : and rather worfe, then any thing better, then that which we had beene in. I found that the Saluages had beene vpon it: and that it was full of wood. I made hafte to the Boate to found
the Baye for feare of fhoalds and funken Rockes: but found it indifferent good. Toward the Euening, it began to blow hard: wherefore we made towards the Ship. She put forth a Buoy and a uarpe; and we rowing for life to recouer her, were put to Lee-ward of her: but by getting hold of the warpe, we halde vp to her. The boate we left halfe full of water: our felues being as wet as drown'd rats; and it made vs the more reioyce, that we had efcapt this great danger. All night, we had a very hard rode-fteede; it blowing a mof violent gale of wind, with fnow and haile.

The third about noone, the wind duld; and we had vp our Anker, ftanding in furthet into the Baye into foure fad. and a halfe water. Here we came againe to an Anker, with our fecond Anker: for many of our men are now ficke; and the reft fo weakened, that we can hardly way our fhooteAnchor; I tooke the Boate, and went prefently afhoare to fee what comfort I could find; This was the firlt time, that I put foote on this Iland; which was the fame that we did after winter vpon. I found the tracks of Deere, and faw fome Fowle : but that that did reioyce me moft, was, that I did fee an opening into the Land, as if it had beene a riuer. To ir we make withall fpeede, but found it to be barr'd; and not 2. foote water at full fea on the Barre: and yet within, a moft excellent fine Harbour, hauing 4, fad. water. In the Euening I return'd aboord, bringing little comfort for our ficke men, more thenhopes.

The 4. it did fnow and blow very hard; yet I got afhoare, and appointed the boate to goe to another place, (which made like a Riuer) and to found it. In the meane time, I went with foure more, fome 4 . or 5 . miles vp into the Countrey; but could find no releefe all that way for our ficke, but a few Berries onely. After we had well wearied our felues in the troublefome woods, wee return'd to the place I had appointed the boate to tarry for me: where at my comming I ftill found her, fhe hauing not beene where I had ordered her, for it had blowne fuch a fierce gale of wind, that fhe could not row to wind-ward. Thus we return'd aboord, with no goodnewes.

It continued foule weather, with fnow and haile, and extreme cold; till the 6 . when with a fanouring winde, we food in neerer to the fhoare, and here moord the fhip.

The 7 . it fnow d all day; fo that we were faine to cleare it of the Decks with fhouels; and it blew a very ftorme withall. It continued fnowing and very cold weather, and it did fo freeze, thatall the bowes of the Ship, with her beake-head, was all Ice : about the Cable alfo, was Tce as bigge as a mans middle. The bowes of the boate were likewife frozen halfe a foote thicke, fo that we were faine to hew and beate it off. The Sunne did fhine very cleere ; and we tore the top-fayles out of the tops, which were hard frozen in them, into a Iumpe: fo that there they hung a Sunning all day, in a very lumpe; the Sunne not hauing power to thawe one drop of them. After the Boate was fitted, we rowed towards the Thoare: but could not come neere the place where we were vfed to land, for that it was all thickned water with the fnow, that had fallen vpon the fands, that are dry at low water. This made it fo difficult to row, that we could not fet through it with 4 . oares : yet fomething higher to the Weft-ward, we got afhoare. Seeing now the winter to come thus extremely on vpon vs, and that we had very little wood aboord; I made them fill the boate, and wentaboord and fent the Carpenter and others to cut wood; others to carry it to the water fide: whileft the boate brought it aboord, for I doubted that we were likely to be debar'd the fhoare, and that we mould not goe to and againe with the boate. It was miferable and cold already aboord the Ship: every thing didfreeze in the Hold, and by the fire fide : Seeing therefore that we could no longer make vfe of our fayles (which be the wings of a Ship) it raifed a many of doubts in our mindes, that here we muft fay and winter. After we had brought fo much wood aboord, as we could conueniently ftowe, and enough as I thought would haue lafted 2. or.3. moneths: The ficke men defired that fome little houfe or houell might be built a fhoare, whereby they might be the better fheltered, and recouser their healths. I tooke
the Carpenter (and others whom I thought fit for fuch a purpofe) and choofing out a place, they went immediately to worke vpon it. In the meane fpace, T my felfe accompanied with fome others, wandered vp and downe in the Woods, to fee if we could difcouer any fignes of Salvages, that fo we might the better prouide for our fafeties, againft them. We found no appearance that there was any on this Iland; nor neere vnto it: The fnow by this time was halfe legge high; and ftalking through it, we retumed comfortleffe to our Companions: who had all this time wrought well vpon our houfe. They aboord the Ship, tooke downe our topfayles in the meane while, and made a great fire vpon the hearth in the hatch way; fo that having well thaw'd them, they folded them vp, and put them betwixt deckes, that if we had any weather, they might bring them againe to yard: Thus in the Euening we returned aboord.

The 12, we tooke our maine fayle from the yard which was hard frozen to it : and carryed it afhoare, to couer our houfe withall : being firft faine to thawe it by a great fire; By night they had coucred it ; and had almoft hedged it about: and the fixe builders did defire to lye in it afhoare that night, which I condifcended vnto : hauing firft fitted them with Muskets and other furniture; and a charge to keepe good watch all night. Moreouer they had a fhoare 2. Greyhounds (a dogge and a bitch) which Ihad brought out of England, to kill vs fome Deere, if happily we could finde any.

By the 13, at night, our houfe was ready; and our fixe builders defired they might trauell vp into the Country to fee what they could difouer.

The 14 . betimes in the morning, being fitted with munition, and their order to keepe together(but efpecially to feeke out fome Creeke or Cove for our Ship) they departed. We aboord, tooke downe our two top-mafts and their rigging: making account if we did remooue, to make vfe of our forefayle and mizzen.
The 15 , in the Euening our hunters returned very weary, which reioyced vs all, hoping we fhould hauc had more of them, to refrefh our ficke men withall. They reported, that they had wandered aboue 20. miles, and had brought this Deere aboue $\mathbf{1} \mathbf{2}$. mile: and that they had feene 9 or 10 . more: The laft night, they had a very cold lodging in the woods; and fo it appeard, for they lookt all almoft tarued, nor could they recouer themflues in 3 . or 4 . dayes after. They faw no figne of Salvages, nor of any rauening wild beafts, nor yet any hope of harbour.
17. The 17. my Lieutenant and 5 . more, defired they might try their fortunes in trauelling about the Iland. But they had farre worfe lacke then the others, although they endured out all night, and had wandered very farre in che fnow (which was now very deepe) and returned comfortleffe and miferably difabled with the coldneffe. But what was worfe then all thic, they had loft one of their company, Tohn Barton, namely our Gunners mate; who being very weary, meerly to faue the going about, had attempted to goc ouer a pond that was a quarter of a mile over; where when he was in the very middef, the Ice brake and clofed vpon him, and we neuer faw him more. Confidering thefe difafters, I refolued to fifh no more with a golden hooke: for feare, I weakned my felfe more with one hunting, then 20. fich deare Decres could doe me good. Being now aflured, that there was no Salvages vpon the Iland, nor yet about vs on the other Ilands: no nor on the maine neither, as farre as we conld difcourer, (which we further proued by making of fires) and that the cold feafon was now in that extremity, that they could not come to vs , if there were any: we comforted and refrefhed our felues, by fleeping the more fecurely. We changed our Jland garrifon, cuery weeke; and for other refrefhing we were like to haue none till the Spring.

From this 10, to the 29. it did (by interims) frow and blow fo hard, that the boate could hardly aduenture afhoare, and but feldome land, vnleffe the men did wade in the thicke congealed water, carrying one another. We did fenfibly per-
ceiue withall, how wee did daily finke into more miferies. The land was all deepe couered with fnow ; the cold did multiply; and the thicke frow waterdid increafe: and what would become of vs, our moft mercifull God and preferuer knew onely.

The 29:I obferued an Eclipfe of the Moone, with what care poffibly I could both in the tryall of the exactneffe of our inftruments, as alfo in the obferuation: I referre you to the obforuation in the latter end of this Relation: where it is at large defcribed. This moneth of OEtober ended with fnow and bitter cold weather.

The firf of November I caft vp accounts with the Stew- November I. ard concerning our victuall: the third part of our time being this day out. I found him an honeft man: for he gaue me anaccount euery weeke what was fpent; and what was fill in the hold remaining vuder his hand: I would take no excufe of leakage or other wafte; vnleffe he diddaily fhow it me. Euery month, I made anew furuey; and cuery fixe moneths, put what we had fpared, by it felfe : whichnow was at leaft a moneths prouifion of Bread; and a fortnights of Peafe and Fifh, \&cc.

The 3. day the boate indeauoured to get afhoare;but could not fet thorow the thicke congealed water.

The 4 they found a place to get afhoare; and fo once in 2, or 3. daye, till the 9 . bringing Beere to our men afhoare in a barrell, which would freeze firmely in the houfe in one night. Other prouifion they had fore. The Ice Beere being thaw'd in a kettell, was not good: and they did breake the Ice of the pondes of water, to come by water to drinke. This pond-water had a moft lothfome fmell with it: fo that doubting left it might be infectious, I cauled a Well to be funke neere the houfe. There we had very good water:which did tafte (as we flatered our felues with it) cuen like milke.

The 10. (hauing ftore ofboordes for fuch a purpofe) I put the Carpenter to worke, to make vs a litcle boate which we might carry (if occafion were) ouer the Ice and make vfe of F 3 her,
her, where there was water. At noone I tooke the Latitude of this Iland, by 2. Quadrants: which I found to be 52. 00 . Iurged the men to make traps to catch Foxes: for we did daily fee many. Some of them were pied, blacke and white: whereby I gathered that there was fome blacke Foxes; whofe skinnes, I told them, were of a great value: and I promifed, that whofoeuer could take one of them, fhould hane the skinne for his reward: Hereupon, they made diuers traps: and waded in the fnow (which was very deepe) to place them in the woods.

The I2. our houfe tooke a fire, but we foone quenched it: We were faine to keepe an extraordinary fire, night and day: and this accident, made me order a watch to looke to it continually: feeing, that if our houfe and clothing fhould beburnt, that all we were but in a woefull condition. I lay afhoare, till the 17 . all which time, our miferies did increafe. It did fnow and freeze molt extremely. At which time, we looking from the fhoare towards the Ship, fhe did looke like a piece of Ice, in the fafhion of a Ship: or a Ship refembling a piece of Ice. The fnow was all frozen about her; and all her fore-part firme Ice : and fo was fhe on both fides alfo. Our Cables froze in the hawfe, wonderfull to behold. I got me aboord: where the long nights I fent, with tormenting cogitations: and in the day time, I could not fee any hope of fauing the Ship. This I was affured of, that it was moft impoffible to endure thefe extremities long Euery day the men muft beate the Ice off the Cables: while fome within boord; with the Carpenters long Calking Iron, did digge the Ice out of the hawfes: in which worke, the water would freeze on their clothes and hands, and would fo benumme them, that they could hardly get into the Ship, without being heau'd in with a rope.

The 19. our Gunner (who as you may remember, had his legge cut off) did languifh vnrecouerably: and now grew very weake: defiring, that for the little time he had to liue, hee might drinke Sacke altogether, which I ordered hee thould doe. rily: and the fnow lay on the water in flakes, as itdid fall, much Ice withall droue by vs : yet nothing hard all this while. In the euening after the watch was fet, a great piece came athwart our haw fe; and foure more followed after him: the leaft of them a quarter of a mile broad: which in the darke did very much aftonifh v , thinking it would haue carried vs out of the Harbour, vpon the fhoalds Eafter point, which was fuil of rocks. It was newly congealed, a matter of two inches thicke : and wee broke thorow it, the Cable and Anker induring an incredible ftreffe, fometimes ftopping the whole Ice. We fhot off three Muskets, fignifying to our men afhoare, that we were in diffreffe: who anfwered vs againe, but could not helpe vs. By ten a clocke, it was all paft; neuertheleffe wee watched carefully: and the weather was warmer then wee had felt it any time this moneth. In the morning at breake of day, I fent for our men aboord, who made vp the houfe, and arriued by 10 . being driaen by the way, to wale thorow the congealed water; fo that they recouered to the Boate, with difficultie. There droue by the Ship many pieces of Ice, though not fo large as the former, yet much thicker: One piece came foule of the Cable, and made the Ship driuc.

As foone as we were cleere of it, we ioyned our ftrengths together, and had vp our Eaftermof Anker: and now I refolued to bring the Ship aground : for no Cables nor Ankers could hold her: But I will here fhow you the reafons, why I brough her no fooner aground. Firft, it was all fony ground: fome fones lying dry, three or foure foot aboue water: fo
that it was tobe furpected, that it was the like all about vs: Secondly, it did ordinarily flow but two foot and a halfe here; and if fhee fhould bed deepe in the fands, we could not cuer come to digge her out againe: for that fhee would not bedry, by foure or fue foot. Thirdly, it was a loofe fand which might rife with the furfe, or fo mount about her : that all our weake powers could not heaue it away in the next foring time. Fourthly, we doubted the tydes would not high fo much in the fummer, as they did now. Fifthly, we could not bring her out of the tydes way; which doth runne fomething quicke here: and the Ice, befides, might driue and mount vp vpon her, and fo ouerfet her, or teare her, and carry away her plankes, iron works and all : fo that we fhould haue nothing left to finih our Pinnaffe with. Sixtly, if it did blow a ftorme at North-weff,or thereabouts; the water would flow ten foot, and $v p$ wards: and that windebeing of the fhoare, it would blow away all the Ice, and there would come in an extraordinary great furfeabout the fhoald Efter-point; which was occafioned by a deepe oucfall. Moreouer, fhee would beate extremely : and if Thee were put vp by the Sea or that furfe, it was very doubtfoll that we fhould neuer haue her off againe. For thefe reafons we endured all the extremitie : fill hoping ypon fome good and fortunate accident. But now all our provident defignes we faw to become foolifhneffe; and that a great deale of miferable labour had beene fpent in vaine by vs. With the flood wee weyed our Weftermof Anker, perceiuing Gods affifance manifefly : becaure it happened to bo fine warme weather, otherwife we had not beene able to worke. The winde wasnow South : which blew in vpon the fhoare ;and made the loweft tydes. We brought the Ship into 12 .foot water: and layd our one Anker in the Offing, and another in fhoald water, to draw her aland at command. Our hopealfo was, that fome fones that were to the Weftward of vs, would fend off fome of the Ice. We then being about a mile from the fhoare, about tena clocke in the darke night, the Ice came driuing vpon vs;and our Ankers came home. She dioue fome two Cables length: and the winde blowing on
the fhoare, by wwo a clock fhe came aground; and itopet much Ice : yet fhee lay well allhight,and we tooke fome reft. sub

The fiue and twentieth, the winde fhifted Eafterly: and put abundance of Ice on vs. When the flood was made, we incouraged one another, and to worke we goe : drawing home our Ankers by maine force, vnder great pieces of Ice, our endeuour being to. put the Ship to the Choare. But to our great difcomforts, when the halfe tyde was made; (which was two houres before high water) the Ship droue amongft the Ice to the Eaftward (doe what we could) and fo would haue on the fhoald Rockes. As I haue formerly faid, thefe two dayes and this day, was very warme weather: and it did raine, which it had not yet but once done, fince wee came hither: otherwife, it had beene impoffible we could have wrought. Withall, the wind fiifted alfo to the South : and at the very inflant, blew a hard puffe: which fo continued for halfe an houre. I caufed our two Top-failes to be had vp frombetwixt deckes, and wee hoyft them vp with ropes in all hafte, and we forft the Ship afhoare, when fhe had not halfe a Cables length te driue on the Rocky fhoalds. In the Euening wee broke way thorow the Ice, and put an Anker to fhoareward in fiue foot water : to keepe her to the - fhoare, if poffible it might be. Here Sir Hugh willowghby came into my mind, who without doubt was driven out of his Harbour in this manner, and fo flarued at fea. But God was more mercifull to vs. About ninca clocke at night, the winde came vp at North-W eft, and blew a very forme. This winde was of the fhoare: which blew away all the Ice from about vs, long before we were afoat. There came in a great rowling Sea withall, about the point; accompanied with a great furfe on the fhoare. And now were we left to the mercy of the Sea, on the ground. By teune, The began to rowle in her docke : and foone atter, began to beate againft the ground. We fooodat the Capftang, as many as could: othersat the Pumpes: for we thought that euery fift or fixt blow would haue faued her to pieces. We heaued to the vttermoft of our ftrengths, to keepe her as neere the ground water : and we drew her vp fo high, that it was doubtfull, if euer we fhould get her off againe. She continued thas beating, till two a clocke the next Morning, and then fhe againe fettled. Whereupon wee went to fleepe, to reftore nature : feeing the next tyde we expected to be againe tormented.

The fixe and twentieth, inthe morning tyde, our Ship did not floate; whereby we had fome quietneffe. After prayers, I cald a confultation of the Mafter, my Lieutenant, the Mates, Carpenter, and Boate-fwayne; to whom I propofed, that now we were put to our laft fhifts; and therefore they fhouldtell me what they thought of it : Namely, whether it were not beft, to carry all our prouifion afhoare : and that when the winde fhould come northerly, it were not fafeft to draw her firther off, and finke her. After many reafonings they allowed of my purpofe :and fo I communicated it to the Company, who all willingly agreed to it. And fo wefell to getting vp of our prouifions : firft our bread, of which we landed this day two Dryfats witha Hogfhead of Beefe : hauing much adoe to fet the Boate thorow the thicke congealed water. In the Euening, the winde came vp at North-Eaft, and Eaft : and fild the Bay choakefuil of Ice.
The twenty ferenth, the Bay continued full of Ice, which I hoped would fo continue and freeze, that we fhould not be put to finke our Ship. This day we could land nothing.

The twenty eighth, at breake of day, three of our men went afhoare ouer the Ice, vaknowne to mee : and the winde comming vpat Weft, droue the Ice from betwixt vs and the fhcare, and moft part out of the Bay alfo: And yet not fo, that the Boate could goe athoare for any thing. I made the Carpenter fit a place againtt all fudden extremities : for that with the firft North-W eft, or northerly wind, Imeant to effeet our laft proied. In therumne of her, on the farboord fide; he cut away the fealing and the planke to the fheathing, fome foure or fiue inches fquare; fome foure foote
foote high from the keele of her, that fo it might be boared out, at an inflant. We brought our bread which was remayning inthe Bread-roome, vp into the great Cabbin; and likewife all our powder; fetting much of our light dry things betwixt deckes.

The nine and twentieth at fiue a Clocke in the Morning, the winde came vpat Weft North-Weft, and began toblow very hard. It was ordinary for the wind to fhift from the Weft by the North, round about. So firft I orderd the Cooper to goe downe in hold, andlooke to all our Caske : thofe that were full, to mawle in the bungs of them : thore that were empty, to get vp, or if they could not be gotten vp, toftaue them. Then to quoile all our Cables vpon our lower tyre : and to lay on our fpare Ankers, and any thing that was weighty, to keepe it downe from rifing. By feuen a Clocke, it blew a ftorme at North-Weft, our bitter enemy. The Ship was already bedded fome two foote in the fand, and whilf that was a flowing, fhee muft beate. This I before had in my confideration : for I thought fhe was fo farre driuen vp , that we fhould never get her off. Yet we had bin fo ferrited by her laft beating, that I refolued to finke her right downe, rather then rume that hazzard. By nine a cloke, fhe began to rowle in her docke, witha moft extraordinary great Sea that was come ; which I foundto beoccadfioned by the formentioned ouerfall. And this was the fatall houre, that put vs to our wits end. Wherefore I went downe in hold with the Carpenter, and tooke his auger and board a hole in the Ship, and let in the water. Thus withall fpeed, we began to cut out other places, to boare thorow, but euery place was full of nailes. By tense, notwithftanding, the lower tyre was coucred with water, for all which, fhebegan fo to beate in her docke, moreand more: that we could not worke, nor fland to doe any thing in her. Nor would She finke fo faft as we would haue her : butcontinued. beating double blowes ; firt abaft, and thenbefore, that it was wonderfull, how fhe could indurea quarter of an houre withit. By twelue a clocke, her lower Tyre rofe: and that
did fo counter-beate on the infide, that it beat the bulke heads of the Bread-roome, powder-roome, and fore piece, all to pieces: and when it came betwixt deckes, the chefts fled wildly about: and the water did flah and flie wonderfully : fo that now we expeited euery minute, when the Ship would open and breake to pieces. At onc a clocke fhee beat off her Rudder : and that was gone, we knew not which way. Thus fhee continued beating, till three a clocke : and then the Sea came vp on the vpper decke : and foone after, fhee began to fettle. In her, wee were faine to finke the moft part of our bedding and clothes : and the Chirurgions Cheft with the reft. Our men that were afhoare, food looking vpon vs : almoft dead with cold,and forrowes to fee our mifery and their owne. We lockt vpon them againe: and both vpon each other with woefull hearts, Darke night drew on; and I bade the Boate to be haled vp; and commanded my louing companions to goe all into her: who (in fome refufing complemeins.) expreffed their faithfull affections to mee; as loth to part fromme. I told them, that my meaning was to goe afhoare with them. And thus, lantly, I forfooke the Ship.

We were fesenteene poore foules, now in the Boate : and we now imagined that we were leapt out of the Frying pars into the fire : The ebbe was made; and the water extraordinary thicke congealed, with finow : fo that we thought affuredly, it would carry vs away into the Sea. We thereupon doublemand foure oares: appointing foure more to fit ready with oares : and fo with the helpe of God we got to the fhoare; haling vp the Boate after vs. One thing was moft frange, in this thicke water : namely, That there wenta great fwelling Sea. Being arriued vpon the land,we greeted our fellowes the beft we could: at which time they could not know vs, nor we them by our habits nor voyces: fo frozen all ouer wee were, faces, haire, and apparell. And here I meane to talse breath awhile, after all this long and vnpleafant Relation of our miferable endeauours: Crauing leaue firft of all to fpeake a word or two in generall.

The winds, fince we came hither, haue beene very variable

## - Paffage to the South Sea.

andvnconftant : and till within this fortnight, the Southerly winde was the coldeft. The reafon I conceive to be, for that it did blow from the Maine land; which was all couered with fnow : and for that the North winds came out of the great Bay which hitherto was open. Adde to that; we were now vnder a South Banke which did fhelter vs : fo that we were not fo fenfible of it.

A North-weft, a North-weft by North, and a North-North-weft winde (if it blew a ftorme) would raife the Tydes extraordinarily : and in briefe, from the Weft Northweft, to the North North-eaft; would raife the tydes in proportion, as they did blow from the middle point : The wind being on the oppofite points (if it blew) it would flow vesy littleat all. The harder it blew, the leffe water it would flow. If it were little winde, or calme ; it would flow indifferently. The tydes doe high ordinarily (without being forced) about three foot: but being forced with the foremencioned winds ; vpward of ten foot. I could perceiue no difference betwixt Neape and fpring tydes: It flowes halfe tyde: that is; the flood comes from the Northward: and thither returnes againe, two houres before it be high water : and it is commonly fo feene, in moft Bayes or Inlets.

## G 3 <br> The



## The VVintering.



Fter we had haled vp the Boate, we went alongft the breach fide in the darke, towards our houfe, where we madea good fire, and with it, and bread and water, wee thawde and comforted our felues, beginning after that to reafon one with another, concerning our Ship.I requir'd that enery one fhould fpeak his mind freely. The Carpenter,( (efpecially) was of the opinion, that fhe was founderd; and would neuer be feruiceable againe. He alledged, that fhe had fo beaten, that it was not poffible, but that all her Ioints were loofe, and feames open: and that by reafon it flawed fo little water, and no Creeke nor Coue being neere, wherein to bring her aground, he could not deuife how he might come to mend it. Moreouer, her Rudder was loft, and he had no Ironworke to hang on another. Some alledged, that we had heaued her vp fo high vpon the fands, that they thought we fhould neuer haue her off againe: and thatthey were affured the was already dockt three foote. Others, that fhe lay in the Tydes way ; and that the Ice might teare her to pieces off the ground: befides which, two of our Ankers we could notnow get from vider the Ice: which when the Ice brake (which would be of a great thickeneffe by the Spring) would breake our Ankers to pieces, and then we fhould haue
no Ankers tobring vs home withal: fuppofed we got off the Thip, \& that fhe proued found alfo.I comforted them the beft I conld with fuch like words: My Mafters and faithfull Companions : be not difmaide for any of thefe difafters, but let vs put our whole truit in God. It is he that giueth, and he that taketh away: he throwes downe withone hand, and raifeth vp with another. His will be done. If it be our fortunes to end our dayes here, we are as neere heauen, as in England; and we are much bound to God Almighty for giuing vs folarge a time of repentance, who as it were dayly calls vponvs, to prepare our folues for a better life in heauen. I makeno doubr, but he willbe mercifull to vs, both here on earth, and in his bleffed Kingdome : he duth not in the meane time deny, but that we may vfe all honeft meanes to faue and prolong our naturall liues withall: and in my Indgement, we are not yet fo farre paft hope of returning into our natiue Countries, but that I fee a faire way by which wee may effect it. Admit the Ship be foundered (which God forbid, I hope the beft) yet haue thofe our owne nation, and others, when they haue beene put to thefe extremities, enen out of the wracke of their loft Ship, built then a Pinnaffe, and recouered to their friends againe. If it be obiected, that they hauc happened into better Climats, both for temperatcneffe of theayre, and for pacificke and open Seas : and provided withall, of abundance of frefh victuall: yet there is nothing too hard for couragious minds : which hitherto you have fhowne, and I'doubt not will fill doe, to the vttermoft.

They all protefted to worke to the vitermoft of their ftrength, and that they would refufe nothing that I fhould order them to doe, to the vttermof hazzard of their liues. I thankethem all: and to the Carpenter for his cheercfull vndertaking, I promifed to giue him fo much plate prefently, as fhouldbe worth ten pound fterling : and if fobe I went to England in the Pinnaffe, I would giue her him freely, and fifty pounds in mony ouer and aboue, and would moreouer gratifie all them, that I fhould fee painefull and induftrious.

Thus we then refolued, to build vs a new Pinnaffe, with the timber we fhould get vpon the Iland: that fo in the fpring, if we found not the Ship ferticeable ; wee might teare her vp, and planke her with the Ships planks. And fo for this night we fettled our felues clofe about the fire : and tooke fome reft till day-light.

The thirtieth betimes in the morning, I caufed the Chirurgion to cut the haire of my head fhort, and to ? haue away all the haire of my face: for that it was become intolerable ; and that it would be frozen fo great with Ice-fickles.

The like did all the reft : and we fitted our felues to worke. The firft thing we were to doe, was to get our clothes and prouifions afhoare : and therefore I deuided the company. The Mafter and a conuenient company with him, were to goe aboord; and to get things out of Hold. The Cock-fwaine with his ging, were to goe in the Boate, to bring and carry things afhoare. My felfe with the reft, to carry it halfe a mile thorow the fnow, vnto the place where we intended tobuild a Store-houfe; As for the heauier things, we purpofed to lay them vpon the Beache. In the afternoone, the winde was at South South-weft, and the water veerd to fo low an ebbe, that we thought we might get fomething out of our Hold: we lanched our Boate therefore : and with oares, fet thorow the thicke congealed water: It did frecze extreme hard: and I did fland on the fhoare with a troubled minde, thinking verily that with the ebbe the Boate would be carried into the Sea; and that then wee were all loft men. But by Gods affiftance they got fafely to the Ship and made a fire there, to fignifie theirarriuall aboord. They fell prefently to worke; and got fomething out of the Hold, vpon the decks : but night comming on, they durft not aduenture to come afhoare, but lay December 1. The firft of December was fo cold, that I went the fame way ouer the Ice to the Ship, where the Boate had gone yéfterday. This day we carried vponour backs in bundics 500 . of our fifh: and much of our bedding and clothes; which we were faine to digge out of the Ice.

The fecond was milde weather : and fome of the men going oter the Ice, fell in, and very hardly recouered: fo that this day we could land nothing, neither by Boate nor backe: I put them therefore to make vs a Store-houfe afhoare. In the euening, the winde came vp at Weft : and the Ice did breake and driue out of the Bay: It was very deepe and large Ise : that we much doubted it would haue fpoyled the Ship.

The third day, there were diuers great pieces of Ice that came athwart the Ship: and fhee fopt them, yet not fo, that we could goe ouer them. We found a way for the Boat: but when fhee was loaden, fhee drew foure foot water, and could not come within a flight-fhot of the fhoare. The men therefore muft wade thorow the thicke congealed water; and carry all things out of the Ship vpon their backs. Euery time they waded in the Ice, it fo gathered about the, that they did feeme like a walking piece of Ice, moft lamentable to behold, In this extreme cold euening, they cut away as much Ice from about the Boate as they could, and pickt it with hand-fpikes out of her, and endeauouring to hoyfe her into the Ship. There being fmall hope, that fhee could goe to and againe any more. But vfe what meanes they could, fhee was fo heauy, that they could not hoyfe her in : but were faine there to leaue her in the tackles by the Ships fide.

The fourth being Sunday, we refted; and performed the Sabbath duties of a Chriftian.

The fift and fixt were extreme cold: and wee made bags of our ftore fhirts: and in them carried our loofe bread ouer the Ice afhoate vpon our backs. We alfo digged our clothes andnew fayles with hand-fpikes of iron, out of the Ice : and carried them afhoare, which we dryed by a great fire.

The feuenth day was fo extremely cold, that our nofes, cheekes, and hands, did freeze as white as paper.

The eighth and ninth, it was extreme cold; and it did fnow much, yet we continued our labour; in carrying and rowling things afhoare. In the euening the water raifed the Ice very high: and it did breake two thoughts of our Boat: and breake in the fide of her: but for that time, we could not helpe it.

The tenth, our Carpenter found timber to make a Kecle, and a Steme for our Pinnace : the reft wrought about our provifions, vntill the I3.day: and that we fpent in digging our boate out of the Ice: which we were faine to doe to the very Keele : and dig the Ice out of her, and then we got her vp on the Ice: in which doing, many had their nofes, cheekes and fingers, frozen as white as paper. The cold now increafed moft extremely. By the 19. we could get no more things out of our Hold: but were faine to leaue s. barrels of Beefe and Porke, all our Beere; and diuers other things: which were all firme frozen in her.

The one and twentieth was fo cold, that we could nor goc out of the houfe.
23.

The three and twentieth we went to haue our boate afhoare; running her ouer our oares: but by 10. a clocke there came fuch a thicke fogge, that it was as darke as night. I made them giue ouer, and make what hafte we could to the fhoare: which we had mutch adoe to finde, for the time, lofing one another. At the laft we met all atthe houfe, the miferableft frozen, that can bee conceiued. Vpon divers, had the cold raifed blifters as bigge as wall-nuts. This we imagined to come, by reafon that they came too haftily to the firc. Our W ell was now frozen vp: fo that digge as deepe as we could, we can come by no water. Melted fnowwater is very vnwholfome : either to drinke or to dreffe our vietuals. It made vs fo fhort-breathed, that we were fcarce able to fpeake. All our Sacke, Vineger, Oyle, and euery thing clfe that wasliquid, was now frozen as hard as a piece of wood, and we muft cut it with a hatchet. Our houfe was all frozen on the infide, and it froze hard within a yard of the fires fide. When I landed firtt vpon this Iland, I found a fpring vader a hils fide: which I then obferuing, had caufed fome trees to be cut for markes to know the place againe by. It was about three quarters of a mile from our houfe. I fent 3. of our men which had beene formerly with me, thither vpon the 24. Thefe wading thorow the fnow, at laft found the place, and fhoueling away the fnow, they made way to
the very head of it. They found it fpring very ftrongly: and brought me a Can of it, for which I was right ioyfull. This fpring continued all the yeere; and did not freeze : but that we could breake the Ice and come to it. We labor'd very hard, thefe three or foure dayes, to get woód to the houfe, which we found to be very troubleforme, through the deepe fnow.

Wee then fettled our bedding and prouifions, providing to keepe Cbriftmas day holy: which we folemnized in the ioyfulleft manner we could: So likewife did we Saint Tobns day: vpon which we named the wood we did winter in, in memory of that Honourable Knight Sir Iohw winter, winters Forreft. And now in ftead of a Chriftmas Tale, I will here defcribe the houfe that we did liue in, with thofe adioyning.
; When I firft refolued to build a houfe, I chofe the mof warmeft and conuenienteft place and the neereft the Ship withall. It was amongft a tuft of thicke trees, vnder a South banke; about a fight-fhot from the Seas fide. True it is, that at that time we could not digge into the ground, to make vs a Hole or Caue in thejearth, (which had been the beft way )becaufe we found water within 2. foote digging: and therefore that proiect faild. It was a white light fand; fo that we could by no meanes make vp a mud-wall. As for fones, there were none neere vs: which, moreouer, were all now couered with the fnow. We had no boords for fuch a purpofe; and therefore, we muft doe the beft we could, with fuch materials as we had about vs.

The houfe was fquare ; about 20. foote cuery way: as much namely, as our mayne-Courfe could well couer: firft we droute ftrong fakes into the earth, round about : which we watteled with boughes, as thicke as mightbe, beating them downe very clofe. This our firft worke was fixe foote high on both fides, but at the ends, almoft vp to the very top. There we left 2, holes, for the light to come in at : and the fame way the fmoke did vent out alfo. Moreouer, I caufed at both ends, three rowes of thicke bufh trees: to be fucke
vp,as clofe together as mought be poffibly. Then at a diftancefrom the houfe, we cut downe trees : proportioning them intolengths of fixe foote; with which we made a pile on both fides, fixe foote thicke, and fixe foote high : but at both ends, tenne foote high, and fixe foote thicke : We left a little low doore to creepe into ; and a portall before that, made with piles of wood, that the wind might not blow into it. We next of all faftned a rough tree aloft ouer all : vpon which we laid our rafters; and our Mayne Courfe ouer thofeagaine: which lying thwart-wayes ouer all, did reach downe to the very ground, on either fide. And this was the Fabricke of the out-fide of it. On the infide, we made faft our bonnet fayles, round about. Then we droue in ftakes and made vs bed-ftead frames; about three fides of the houfe: which bed-fteads were double, one vnder another: the lower-moft, being a foote from the ground: Thefe, we firft fild with boughes, then we layd fome fpare fayles on that, and then our bedding and clothes. We made a Hearth or Caufie in the middle of the houfe, and on it, made cur fire: fome boords wee layd round about our Hearth, to ftand vpon: that the cold dampe fhould not ftrike vp into vs. With our Waft-clothes, we made vs Canopies and Curtaines: others did the like with our fmall fayles. Our fecond houfe was not paft 20 , foote diftant from this, and made for the watteling much after the fame manner, but it wasleffe, and couered with our fore-Courfe: It had no pyles on the South fide : bur in liew of that, we pilde vp all-our Chefts, on the infide: and indeed the reflexe of the heate of the fire againft them, did make it warmer then the Manfion houfe. In this houfe, we dreft our victuall : and the fubordinate crue did refrefh themfelues all day in it. A third houfe, (which was cur ftore-houfe) we likewife made, fome twenty paces off from this ; for feare of firing. This houfe was onely a rough tree faftened aloft : with rafters layd from it to the gronnd, and couered ouer with our new fuite of failes. On the infide, we hadlaid fmall trees, and conered them ouer with boughes : and fo ftor'd vp our Bread,

Bread, and Fifh in it; about two foote from the ground: the better to preferue them. Other things lay more careleffely.

Long before Cbriftmas, our manfion houfe was couered thicke ouer with Snow:almoft to the very soofe of it. And fo likewife was our fecond houfe : but our Store-houfe, all ouer : by reafon we made no fire in it. Thus we feemed to liue in aheape, and Wilderneffe of Snow; forth adores we could not go, but vpon the fnow: in which we made vs paths middle deepe in fome places : and in one fpeciall place, the length of tenne fteps. To doc this, we muft fhouell away the Snow firf; and then by treadding, make it fomething hard vaderfoote: The Snow in this path, was a full yard thicke vnder vs. And this was our beff gallery forthe fickemen: and for mine owne ordinary walking. And both houfes and walkes, we did daily accommodate more and more, and make fitter for our vfes.

The twenty feuenth, we got our Boate afhore: and fetcht vp fome of our prouifions from the beach fide into the Store-houfe : and fo by degrees did we with thereft of our prouifions : with extremity of cold and labour, making way with fhouls thorow the deepe Snow ; euen from the Scafide vnto our Store-houfe. And thus concluded we the old yeere. 1631.

Tanuary, 1632.
The firf of Ianuary (and for the moft part all the moneth) was extreme cold.

The fixth, I obferued the latitude, with what exactneffe Icould (it being very cleere Sun-fhine weather) which I found to be 51.52 . This difference, is by reafon that here is a great Refraction.

The one and twentieth, Iobfersed the Sunne to rife like it, the better to confirme my Iudgement: and we all agreed, that it was twice as longas it was broad. We plainely perH 3 recouered his roundneffe.
26. The fixe and twentieth, I obferued, when the Eafterne edge of the cMoone did touch the Planet CMars, the Lions heart was then in the Eaft quarter 21. 45. aboue the Horizon: but all this was not done with that exactneffe, that I haue done other obferuations.
30. \& 3 1. The thirtieth and one'and thirtieth, there appeared in the beginning of the night, more Starres in the firmament, then euer I had before feene by two thirds. I could fee the Cloud in Cancer full of fmall Starres: and all the via luctex, nothing but fmall Starres : and amongit the Plyades, a great many fmall Starres. About tenne a Clocke, the Moone did rife; and then a quarter of them uas not to be feene. The wind for the moft part of this month, hath beene Northerly, and very cold : the warmeft of which time, wee imployed our felues in fetching Wood, working vpon our Pinnaffe and other things that happened. In the beginning of this moneth, the Sea was all firmely frozen ouer, fo that we could fee no water any way. I hope it will not feeme tedious to the Readers, if I here deliuer mine owne opinion, how this abundance of Ice comes to be ingendered.

The Land that encircles this great Bay, (which lyes in a broken Irregular forme, making many little fhoald Bayes, and Guts, being, morconer, full of Ilands and dry fands) is for the moft part low and flat, and hath flat fhoalds adioyning to it, halfe a mile or a mile, that are dry at low water. Now you muft know, that it flowes halfe tyde (as I have often experienced) that is, from whence the flood commeth, the water thither returneth, two houres before it be high water, or full Sea. It feldome raines, after the middle of September: but fnowes : and that Snow will not melt on the Land nor Sands; At low water when it fnowes (which it doth very often) the fands are all couered ouer with it; which the halfe tyde carries officioufly (twice in twentie foure houres ) into the great Bay, which is the common Rendezvous of it. Eucry low water, are the fands left cleere, to ga-
ther more to the increafe of it. Thus doth it daily gather together in this manner, till the latter end of OEtober, and by that time hath it brought the Sea to that coldneffe, that as it fnows, the fnow will lye vpon the water in flakes without changing his colour; but with the winde is wrought together; and as the winter goes forward, itbegins to freeze on the furface of it, two or three inches or more in one night: which being carried with the halfe tyde, meets with fome obfacle, (as it foone doth) and then it crumples and fo runnes vpon it felfe, that in a few houres it will be fiue or fixe foote thicke. The halfe tyde ftill flowing, carries it fo faftaway, that by December it is growne to an infinite multiplication of Ice. And thus by this foring of it vp, the cold gets the predomination in the Sea (which alfo furnifheth the Springs and water, in the low flat lands ) that it cooles itlike it felfe. This may appeare by our experience, though in all this, Ifiecly fubmit my felfe vnto the better learned. Our men found it more mortifying cold to wade thorow the water in the begimning of Iune when the Sea was all full of Ice; then in December, when it was increafing. Onr Well, moreouer, out of which we had water in December, we had none in Iuly.

The ground at ten footedeepe, was frozen. The quantitie of the Ice, may very cafily be made to appeare, by Mathemoricall Demonftration: and yet I am not of the opinion, that the Bay doth freeze all ouer. For the one and twentieth, the winde blowing a forme at North, we could perceiue the Ice to rife fomething in the Bay.

## February, 1632.

The cold was as extreme this moneth, as at any time we had feltit this yeere: and many of our men complained of infirmities. Some, of fore mouthes; all the teeth in their heads beingloofe, their gums fwolne, with blacke rotten flefh; which muft euery day be cutaway. The paine was fo fore on them, that they could not eate their ordinary meat. Others complained of paine in their heads, and their brefts : Some of weakeneffe in their backs; Others of aches in their thighs
thighs and knees: and others, of fwellings in their legges. Thus were ewo thirds of the company, vnder the Chirurgions hand. And yef neuertheleffe, they muft worke daily ; and goe abroad to fetch wood, and timber ; notwithftanding the. moft of the had no fhooes to put on. Their fhooes, vpon their comming to the fire, out of the frow, were burntand fcorcht vpon their feete: and our fore-ffiooes were all funke in the Ship. In this neceffitie they would make thisfhift: To bind clouts about their feet, and endeauoured by that poore helpe, the beft they could to performe their duties. Our Carpenter likewife is by this time falne ficke to our great difcomforts. I practifed fome obferuations by the rifing and fetting of the Sunne, calcoulating the time of his rifing and fetting, by very true running glaffes. As for our Clocke and Watch, notwithftanding we fill kept them by the fires fide; ina Cheft wrapt in clothes, yet were they fo frozen, that they could not goe. My obferuations by thefe Glaffes, I compared with the Stars comming to the $\mathbf{c}$ Meridian. By this meanes wee found the Sunne to rife twentie minutes before it fhould: and-in the euening to remaine aboue the Horizon twentie minutes (or thereabouts ) longer then it fhould doe, And all this by reafon of the Refraction.
Since now I haue fpoken fo much of the cold, I hope it will not be too coldly taken, if I in a few words make it fomeway to appeare vito our Readers.

W ee made three differences of the cold : all according to the places. In our houfe, In the woods: and in the open Ayer, vpon the Ice, in our going to the fhip.

For thelaf, it would be fometimes fo extreme, that it was not indurable : no Cloathes were proofe againft it ; no motion could refift it. It would, moreouer, fo freeze the haire on our eye-lids, that we could not fee: and I verily beleeue, that it would haue ftifled a man, in a very few houres: we did daily find by experience, that the cold in the Woods would freeze our faces, or any part of our flefh that was bare; but it was yet not fo mortifying as the other. Our houfeon the out-fide, was couered two thirdparts with Snow ; and on

## The Wistering.

the infide frozen, \&hang with Icefickles, The Cloathes on our beds would be couered with hoare froft: which in this little habitack, was not farre from the fire. But let vs come a little neerer to it. The Cookes Tubs, whercin he did water his meate, ftanding about a yard from the fire, and which he did all day plye with melted Snow-water : yet in the night feafon, whilft he flept but one watch, would they be firme frozen to the very bottome. And therefore was hee faine to water his meate in a braffe Kettle clofe adioyning to the fire ; and I haue many times both feene and felt by putting my hand into it ; that fide which was next the fire, was very warme, and the other fide an inch frozen; Ileaue the reft to our Cooke; who will almoft fpeake miracles of the cold. The Surgeon, who had hung his bottles of firrops, and other liquid things as conteniently as he could to preferue them; had them all frozen : our Vineger, Oyle, and Sacke, which we had in fmall Caske in the houfe, was all firme frozen. It may furcher in generall be conceiued, thatin the beginning of Iune, the Sea was notbroken vp: and the ground was yet frozen, and thus much wee found by experience, in the burying of our men : in fetting $v p$ the Kings Standard towards the latter end of Tune: and by our Well, at our comining away in the beginning of Iuly: at which time vpon the land for fome other reafons, it was very hote weather.

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\text { CMarch, } 1632 \text {. }
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The firft of this monethbeing Saint Davids day, we kepe Holyday, and folemnized it in the manner of the Ancient Britaines: praying for his Highneffe happineffe Charles Prince of Wales.

The fifteenth, one of our men thought he had feerie a Deere: whereupon he with two or three more defired that they might go to fee if they conld take it: I gaue them leaue: but in the Eviening they returned fo difabled with cold, which did rife vp in blifters vnder the foales of their feete and vpontheir legges, to the bigneffe of Walnuts; that they
could not recouer theirformer eftate (which was not very well) in a fortnight after.

The fixe and twentieth, three more defire that they alfo might goe out totry their fortunes: but they returned worfe difabled; and euen almoft ftifled with the cold,

This Euening, the Moone rofe in a very long Qvale alongt the Horizon.

By the laft of this moneth, the Carpenter had fet vp 19. ground timbers: and 34. Staddles; and (poore man) hee proceedeth the beft he can, though he be faine to be led vato his labour.

In briefe, all this moneth hath beene very cold. The wind about the N. W. The fnow as deepe as it hath beene all this winter; Butto anfwer an obiection that may be made, You were in a wood (may fome men fay vnto vs) and therefore you might make fire enough to keepe you from the cold. It is true, wewere in a wood; and vodera South-banke too: or otherwife, we had all farued. But I muft tell you withall; how difficult it was to haue wood in a wood: And firf, I will make a mufter of the tooles we had: The Carpenter in his Cheft had 2. Axes indeed: but one of them was fpoyld in cutting downe wood to pile about our houfe before Chriftmas; When we came firft aland, we had but two whole hatchets, which in a few dayes broke 2. inches below the Sockets. I cald for 3, of the Coopers hatchets: The Carpenters axe and the Coopers beft hatchet I caufed to be locktvp: Theother 2. hatchets to be new helu'd, and the blades of the 2 . broken hatchets, to be put into a cleft piece of wood, and then to be bound about withrope yarne as faft as might be: which muft be repaired euery day. And thefe were all the cutting tooles we had: moreouer the 6 . of Febriary the Carpenter had out his beft axe about fomething, and one of the company in his abfence, by his vadifcreete handling of it, brake that too, two inches below the Socket: we mult henceforth order thefe pieces of tooles the beft we could: wherefore I gane order, that the Carpenter fhould have one of the Coopers hatchets: they that lookt for tim-
ber in the woods, the other : and they that cut downe wood to barne, were to haus the 2. pieces. And this was before Chritmas.

The three that were appointed to looke crooked timber ${ }_{3}$ muft ftalke and wade, (fometimes on all foure) thorow the fnow : and where they faw a tree likely to fit the mould: they muft firt heaue away the fnow, and then fee if it would fit the mould : if not, they muft feeke further: if it did fit the mould ; then they muft make a fire to it, to thawe it : otherwife it could not be cut. Then cat it downe, and fit it to the length of the mould: and then with other helpe, get it home : a mile thorow the fnow.

Now for our firing. We could not burne greene wood, it would fo fmoke, that it was not indurable : yea the men had rather flarue without in the cold, then fit by it. As for the dry wood, that alfo was bad enough in that kinde : for it was full of Turpentine, and would fend forth fuch a thicke finoke, that would make abundance of foote: which made vs all looke, as if we had beene free of the company of ChimneySweepers. Our cloathes were quire burnt in pieces about vs: and for the moft part, we wereall without fhooes: But to our Fuellers againe. They mutt firft (as the former) goe vp and downe in the frow: till they faw a ftanding dry tree: for shat the fnow couered any that were fallen. Then they mult hacke it downe with their pieces of hatchets : and then others muft carry it home thorow the fnow. The boyes with Cuttleaffes, muft cut boughes for the Carpenter: for euery piece of timber that he did worke, muft firftbe thaw'd in the fire: and he muft have a fire by him, or he could not worke. And this was our continuall labour, throughout the forementioned cold: befides our tending of the ficke, and other neceffary imployments.

## Aprill. I6320

The firft of this moneth being Eafter-day, we folemaized as religioully as God did gine vs grace. Both this
day and the 2, following Holy-dayes were extreme cold : And now fitting all about the fire, we reafoned and confidered together vpon our eftate; We had 5 . men (whereof the Carpenter was one: ) not able to doe any thing. The Boatefwayne and many more, were very infirme: and of all the reft, we had but 5 . that could cate of their ordinary allowance. The time and feafon of the yeere came forwards apace: and the cold did very little mitigate. Our Pinnace was in an indifferent forwardneffe: but the Carpenter grew worfe and worfe: The Ship (as we then thought) lay all full of folid Ice: which was weight enough to open the feames of any new and found veffell: efpecially of one that had layne fo long vpon the ground as fhe had done. In briefe, after many difputations, and laying open of our miferable and hopeleffe effates, I refolued vpon this courfe: that notwithflanding it was more labour, and though we declined, weaker ftill and weaker: yet that with the fiift warme weather, we would begin to cleere the Ship: that fo we might haue the time before vs, to thinke of fome other courfe. This being ordered, we lookt to thofe tooles we had, to digge the Ice out of her: we had but 2. Iron barres afhoare: the reft were funke in the Ship: and one of them was broken too, Well ! we fell to fitting of thofe barres, and of 4 . broken thouels that we had: with which we intended (as after we did) to digge the Ice out of her : and to lay that Ice on a heape, vpon the Lar-boord bowe, and to finke downe that Ice to the ground fo faft, that it hould be a Barricadoe to vs, when the Ice brake vp; which we feared would teare vall to pieces.
6. The 6. was the deepef fnow we had all this yeere : which fild vp all our pathes and wayes, by which we were vfed to goe vnto the wood: This fnow was fomething moyfter and greater, then any we had had all this yeere: for formerly it was as dry as duft ; and as fmall as fand, and would driue like duft with the winde.

The weather continued with this extremitie, vntill the 75, at which time our fyring was harder frozen, then it had beens
beene all theyeerebefore. I had often obferued the diffirence betwixt cleere weather and miftic Refrattious weather : in this manner. From a little hill which was neereadioyning to our houfe; in the clecreft weather, when the Sunne fhone with all thepuritic of ayre, that I could conceiue: we conld not fee a littie lland; which bare off vs South South-eaft,fome foure leagues off: butif the weather were miftic (as aforefaid then we fhould often fee it, from the loweft place. This little Iland Ihad feene the laft yeere, when I was on $D$ anby Iland: The 13.I tooke the height of it inffrumentally; fanding neere the Seas fide: which I found to be 34 . minutes: the Suunc being 28. degrees high. This fhowes, how great ${ }_{2}$ Refration here is. Yet may this be noted by the way; That Ihauc feene the land elcuated, by reafon of the refratious ayre; and neuertheleffe, the Sunne hath rifen perfect round.
The fixteenth was the mof comfortable Sun-fhine day, that came this yeere : and I put fome to cleere of the fow from the vpper decks of the Ship; and to clecre and dry the great Cabbin, by making fire in it. Others I put to digge downe thorow the Ice, to come by nur Anker, that was in fhoald water, which the $1 \%$. in theaftemoone we got $y p$ gand carried aboord.
The e eighteenth, Iput them to digge downe thorcw the Ice, neere the place where we thought our Rudder might be. They digged downe, and cameto water: but no hope of fintding of it: we had many doubts, that it mought be fanded: or that the Ice might haue carried it away already, the laft yeere: or if we could not recouer it by digging before the Ice brake vp, and droue, there waslittle hope of it.

The nineteenth wee continucd our myning worke aboord the Shippe; and returmed in the Euening to Supper afhoare : This Day, The Mafter and two others, defired that they might lye aboord: which I condifended to: for indeed they had laine very difcommodioully all the winter, and with ficke bed-fellowes: as $I$ my felfe had done; euery one in that kinde taking their fortunes. By lying aboord, they auoyded the hearing of the miifera- ble
ble groanings : and lamenting of the ficke men all night long: enduring ( poore foules ) intolerable torments. By the one andtwentieth, we had laboured fo hard, that we came to fee a Caske; and could likewile percciue that there was fome water in the Hold. This we knew could not be thawed water ; becaufe it did ftill freeze night and day very hard aboord the Ship, and one the land alfo.

By the three and twentieth in the Euening, wee came to pierce the forementioned Caske: and found it was full of veiy good Beere, which did much reioyce vs all: efpecially the fickemen, notwithftanding that it did tafte a little of bulgewater. By this we at that time thought that the holes we had cut to finke the Ship, were frozen, and that this water had ftood in the Ship all the Winter.

The foureand twentieth, we wentbetimes in the morning to worke: but found that the water was rifen aboue the Ice where we had left work, about two foot: for that the wind had blowne very hard at North, the night before. In the morning, the wind came about South, and blew hard, and although we bad little reafon for it; we yet expected a lower veere of the water. I there vpon put them to worke on the outfide of the Ship: that we might come to the lower hole, which we had cut in the Sterne-shootes. With much labour by night, we digged downe thorow the Icc to it; and found it vnfrozen (as ithad bin all the Winter) and to our great comforts, we found that on the infide, the water was ebd euen with the hole : and that on the outfide, it was ebd a foot lower. Hereupon I madea fhot-boord to be naild on it: and to be made as tight as might be, to try if the water came in any other way. To the other two holes, we had digged on the infide : and found them frozen? Now I did this betimes, that if we found the Ship foundered, we might refolue of foine courfe to faue, or prolong our liues, by getting to the maine before the Ice were broken vp: for, as for our Boate, it was too litetle, and bulged, befides that. Our Carpenter was by this time paft hope : and therefore little hope had we of cur. Pinnaffe. But which was wort of all, we
had not foure men able to traucll through the Snow ouer the Ice, and in this miferable eftate were we at this prefent.

The 25 , we fatisfied our longing : for the winde now comming about Northerly, the water rofe by the Ships fide (where we had digged downe) a foot and more aboue the Hold: and yet did not rife within boord. This did fo incourage vs, that we fell very luftily to digging, and to heane out the Ice, out of the Ship. I put the Cooke and fome others, to thaw the pumps: whoby continnall powring of hot water into them; by the 27 . in the morning they had cleered one of them: which we fay-ing, found that it did deliuer water very fufficiently. Thus we fell to pumping : and hauing cleered two foot water, we then left to hauc a fecond tryall. Continuing our worke thus, in digging the Ice; by the 28. we had cleered our other pumpe: which we alfo found to deliuer watervery well: We found likewife, that the water didnot rife any thing, in Hold.

The 29 . it rainedall day long, a fure figne to vg , that winter was broken vp.

The 30 . wee were betimes aboord at our worke: which day, and the one and thirtieth, were very cold, with fnow and haile : which did pinch our ficke men more then any time this yeere. This euening being May Euen ; we returned late from our worke to our houfe: and made a good fire, and chofe Ladies, and did ceremonioufly weare their names in our Caps: endeauouring to reniue our felues by any meanes. And becaufe you heare vs in this merry humour; I will make knowne to you what good cheere we kept at Chriftmas and Eafter: and how we had dieted our feluesall the winter.

At our comming foorth of England, we were ftored with all fort of Sea prouifions : as Beefe, Porke, Fifh, \&cc, but now that we had little hope of refrefhing, our Cooke did order it in this manner.

The Beefe which was to ferue on Sunday-nightto Supper; he did boyle on Saterday-night, in a Kettle full of water, with a quart of Oatemeale, about an houre: Then taking the Beefe out, he boyled the reft till it came to halfe the quantitie: And
this we called porridge : which with bread we did eate, as hot as we conld: and after this we had our ordinary of fifh. Sunday dinner, wee had Porke and Peafe : and at night the former boyled Beefe made more porridge. In this manner our. Tuerdayes Beefe was boyled on the Munday nights : and the Thurddayes; vpon the W ednefdayes. And thus all the weeke (except Friday night) we had fome warme thing in our bellies euery fupper. And (furely) this did vs a great dealc of good. Butfoone after Chriftmas, many of vs fell ficke, and had fore mouthes: and could neither cate Beefe, Porke, Fifh, nor Porridge. Their dyet was onely this: They would ponnd Bread, or Oatmeale in a morter, to meale : then fry it in a frying panne, with a little oyle, and fo cate it. Some would boyle Peafe to a foft pafte, and feed as well as they could, vpon that. For the moft part of the winter, water was our drinke. In the whole winter, we tooke not aboue a doozen Foxes : many of which would be dead in the traps, two or three dayes, oftentimes; and then when the blood was fettled, they would be vnwholefome. But if we tooke one aliue, that had not bin long in the trap, him we boyled, and madebroth for the weakeft ficke men of him : the flefh of it being foft boyled they did eate alfo.

Some white partridges we kild: but not worth the mentioning towards any refrefhing.

Wehad three forts of fickemens. Thofe that could not mouenor turne themfelues in their Beds, who muft be tended like an Infant. Others that were as it wevere creepled with fcuruy Aches. And others lafty, that were fomething better. Moft of all had fore mouthes. You may now aske me, how thefe infirme men could worke? I will tellyou: Our Surgeon (which was diligent, and a fweet-conditioned man, as euer I faw) would be vp betimes in the mornings ; and whileft hedid picke their Teeth, and cutaway the dead flefh from their Gummes, they would bathe their owne thighes, knees, and legges. The manner whereof way this: There was no tree, bud, nor herbe ; but we made tryall of it: and this being firf boyled in a Kettle, and then put in a fmall

Tubs, and Bafons: they put it vnder them, and couering themfelues with Cloathes vpon it ; this would fo mollifie the grieued parts, that although, when they did rife out of their Beds, they would be fo crippled, that they could farce fland : yet after this done halfe an houre, they would be able to goe (and muft goe) to wood, thorow the Snow, to the Ship, and about their other bufinieffe. By night, they would be as bad againe: and then they muft bee bathed, anoynted, and their mouthes againe dreft, before they went to Bed. And with this dyet, and in this manner, did we goe thorow our miferies.

I euer doubted, that we fhould be weakeft in the Spring ; and therefore had I referued a Tun of Alegant Wine vnto thistime. Of this, by putting feuen parts of water, to one of wine, we made fome weake Beuerage : which (by reafon that the wine by being frozen, had loft his Vertue) was littlebetter then water. The ficker fort had a Pint of Alegant a day, by it felfe; and of fuch poore Aqua vitx too, as we had, they had a little dramme allowed them next their hearts euery morning; and thus wee made the beft vfe of what we had, according to the feafons.

## CMay, $\mathrm{IG}_{3} 2$.

The firft, we went aboord betimes, to heaue out the Ice.
The fecond, it did fnow and blow, and was fo cold, that we were faine to keepe houfe allday. This vnexpected cold at this time of the yeere did fo vexe our ficke men; that they grew worfe and worfe: we cannot now take them out of their beds, but they would fwound: and we had much adoe, to fetchlife in them.

The third, thofe that were able, went aboord betimes to heaue out the Ice. The Snow was now melted in many places vpon the Land, and ftood in plafhes: and now there came fome Cranes, and Geefeto it.

The fourth, while the reft wrought aboord, I and the Surgeon went with a couple of pieces, to fee if we could
kill any of thefe fowle for our ficke men, but neuer did I fee fuch wild-fowle: They would not indure to fee any thing mooue. Wherefore we returned within 2 . houres, not being able to indure any longer flalking thorow the fnow, and the wet plafhes. I verily thought that my feet and legs would haue fallen off, they did fo torment me with a king.

The 6. Iohn W ardon, the Mafter of my Ships chiefe Mate dyed, whom we buried in the Euening (in the moft Chri-ftian-like manner we could) vpon the top of a bare hill of fand: which we cald Brandon Hill.

The weather continued very cold: freezing fo hard in a night, that it would beare a man.

By the 9. we were come to, and got vp our fiue barrels of Beefe and Porke, and had found 4. Buts of Beere, and one of Cydar, which God had preferued for vs: It had layne vnder water all the winter; yet we could not perceiue that it was any thing the worfe. God make vs euer thankefull for the comfort it gaue vs.
10. The Io. it did fnow and blow fo cold, that we could not ftirre out of the houfe : yet neuertheleffe, by day the fnow vanifheth away apace on the land.
IT. \& 12.
The It. we were aboord betimes, to heaue out Ice. By the 12. at night, we had cleered outall the Ice, out of the Hold: and found likewife our fore-fhooes which had layne foakt in the water all the winter: bitt we dried them by the fire, and fitted our felues with them. We ftrooke againe our Cables into the Hold; there ftowd we a But of Wine alfo, which bad beene all the Winter on the vpper decke, and continuted as yet, all firme frozen. We fitted the Ship alfo: making her ready to finke heragaine, when the Ice.brake vp. We could hitherto find no defect in her : and therefore well hoped, that fhe was ftanche. The Carpenter, neuertheleffe, did earneftly argue to the contrary : alleadging, that now fhe lay on the ground, in her Docke; and that the Ice had fild her defects: and chat the Ice was the thing that kept out the water: but when fhe fhould come to labour in the fea; then doubtleffe, the would open. And indeed we could
now fee quite through her feames, betwixt wind and water. But that which did trouble vs as illas all this, was the loffe of ber Rudder: and that fhe now lay in the very ftength of the Tyde : which, when euer the Ice droue, might teare her to pieces. But we fill hoped the beft.

The 13. being the Sabbath Day, we folemnized; giuing God thankes for thofe hopes and comforts we dayly had: The weatherby day-time was pretty and warme: but it did freeze by night : yet now we could fee fome bare patches of land.

The 14, we began a new fort of worke. The Boatefwaine and a conuenient number fought athoare the reft of our Rigging : which was much fpoyld by pecking of it out of the Ice : and this they now fell to fitting, and to feruing of it. I fet the Cooper to fit our Caske, although (poore man) he was very infirme: my intent being, to paffe fome Cables vnder the Ship, and fo to Buoy her vp with thefe Caske; if otherwife we could not get her off. Some others, I ordered to goe fee, if they could kill fome wild-fowle for our ficke men: who now grew worfe and worfe. And this is to be remembred, that we had no fhor, but what we did make of the Aprons of our Gunnes and fome old pewter that I had: for the Carpenters-fheet-lead, we durft not vfe.

The 15. I manured a little patch of ground, that was bare of fnow; and fowed it with Peafon : hoping to haue fome of the hearbs of them fhortly, to eate: for as yet we can finde no greene thing to comfort vs.

The $\mathbf{1 8}$. our Carpenter william Cole dyed, a man general-
13. ly bemoaned of vs all: afmuch for his innate goodneffe, as for the prefent neceffity we had of a man of his quality. He had indured a long fickneffe, with much patience, and made a very godly end. In the Euening, we buried him by Mafter Wardos: accompanied with as many as could goe: for 3 . more of our principall men, lay then expecting a good houre. And now were we in the moft miferable eftate, that we were in all the voyage. Before his extreme weaknefle, he had brought the Pinnace to that paffe, that fhe was ready
to be boulted and trenneld; and to be ioyn'd together to receiue the planke : fo that we were not fo difcouraged by his death, but that we did hope of our felues to finifh her: if the Ship proved vnferuiceable.

This our Pinnace was 27. foot by the Kecle, 10. foot by the Beame, and 5 . foot in Hold: fhe had 17. ground timbers, 34; principall Staddles, and 8. fhorr Staddles. He had contriued Her with a round fterne, to faue labour: and indeed fhe was a well proportioned Veffell. Her burthen was 12. or 14 . Tunne.

In the Euening, the Mafter of our Ship, after buriall rerurning aboord Ship, and looking about her: difcouered fome part of our Gunner; vnder the Gun-roome ports. This man, we had committed to the Sea at a good diftance from the Ship, and in deep water, neere 6 . moneths before.

The 19. in the morning, Ifent mento dig him out, he was faft in the Ice, his head downewards, and his heele vpward, for he had but one legge; and the plafter was yet at his wound: In the afternoone, they had digd him cleere out: after all which time, he was as free from noyfomeneffe, as when we firft committed him to the Sea. This alteration had the Ice and water, and time onely wrought on him: that his flefh would flip vp and downe vpon his bones, like a gloue on a mans hand. In the Euening we buried him by the others. This day, one GeorgeVggaxes (who could handle a toole beft of vs all) had indifferent well repaired ourboate : and fo we ended this mournefull weeke. The fnow was by this time prettily well wafted in the woods: and we hauing a high tree, on the higheft place of the Iland, which we called our watch-tree; from the top of it we might fee into the fea, but found no appearance of breaking vp yet.
This 20. being Whit-Sunday, we fadly folemnized, and had fome tafte of the wilde-fowle: but not worth the writing.

The one and twentieth, was the warmeft Sunne-fhine-day, that came this yeere. I fent 2, a-fowling : and my felfe taking the Mafter, the Surgeon, and one more, with our pieces
and ourDogs, we went into the woods to fee what comfort wee could finde. Wee wandred from the houfe cight miles; and fearcht with all diligence: but returned comfortleffe, not an herbe nor leafe eatable, that we could finde. Our Fowlers had as bad fucceffe. In the woods, wee found the Snow partly wafted away, fo that it was paffable. The ponds were almoft vnthawd : but the Sea from any place we could fee all firme frozen.

The fnow doth not melt away here with the Sunne or raine; and fo make any land-floods; as in England: but it is exhaled vp by the Sunne, and fuckt full of holes, like honeycombs : fo that the fand whereon it lyes, will not be at all weetted. The like obferuation weealfo had: that let itraine cuer fo much, you fhall fee no land-floods after it.

The two and twentieth, we went aboord the Ship: and found that thee had made fo much water, that it was now rifen aboue the ballaft, which made vs doubt againe of her foundneffe. We fell to pumping, and pumpt her quite dry. And now by day fometimes, we haue fuch hot gloomes, that we cannot endure in the Sunne : and yet in the night it would freeze very hard. This vnnaturalneffe of the feafon, did torment our men, that they now grew worfe and worfe daily.

The three and twentieth, our Boat-fwayne (a painefull man ) hauing beene long ficke, which he had heartily refifted, was taken with fuch a painefull ache in one of his thighs; that we verily thought he would haue prefenty dyed. He kept his bedall day in great extremitie: and it was a maxime amongt vs; that if any one kept his bed two dayes, he could rife no more. This made euery man to ftriue to keepe vp, for life.

The fourc and twentieth was very warme Sun-hine : and the Ice did confume by the fhores fide, and cracktall ouer the Bay, with a fearefull noyfe. About three in the afternoone, we could perceiue the Ice with the ebbe to driue by the Ship. Whereupon I fent two with all fpeed vnto the Mafter, with order : to beate out the hole, and to finke the Ship: as likewife to looke for the Rudder, betwixt the Ice. This he pre-
fently performed: and a happy fellow, one Dasid Hammon, pecking betwixt the Ice, ftrooke vpon it, and it came vp with hislance : who crying that he had found it, the reft came and got itvp on the Ice, and fo into the Ship. In the meane fpace, with the lirtle drift that the Ice had, it began to rife and mount into high heaps againft the fhoald fhoares, and rocks : and likewife againft the heape of Ice, which we had put for a Barricado to our Ship : but with little harme to vs. Yet we were faine to cut away 20 . faddome of Cable which was frozen in the Ice. After an houre, the Ice fettled againe, as not haning any vent outwards. Oh ! this was a ioyfull day to vsall: and we gave God thanks for the hopes we had of it.

The fiue and twentieth was a fine warme day ; and with the ebbe, the Ice did driue againft the Ship, and fhake her fhrowdly.

The fixe and twentieth, I tooke the Chirurgion with mee, and went againe to wander the woods: and went to that Bay, where laft yeere wee had loft our man Tohn Barton. But we could finde no figne of him, nor of ather reliefe.
By the eight and twentieth it was pretty and cleere, betwixt the Ship and the fhoare, and I hoped the Ice would no more dangeroufly oppreffe vs. Wherefore I caufed the lower hole to be firmely ftopt: the water then remaining three foot, aboue the Ballaft.

The nine and twentieth, being Prince Charles bis birth day; we kept Holy-day, and difplay'd his Maiefties Colours : both aland and aboord; and named our habitation Chasles Tomne; by contraction Charleos: and the Iland, Charlron Iland.

The thirtieth we lanched our Boate; and had intercourfe fometimesbetwixt the Ship and the fhoare by Boat : which was newes to vs.
-The laft of this moneth, wee found on the Beach fome Vetches, to appeare out of the ground; which I made the men to pick $v p$, and to boyle for our ficke men.
(This day, we made an end of fitting all our Rigging and Sayles : and it being a very hot day, we did dry and new make our Fifh in the Sunne : and ayred all our other prouifons.

There was not a man of vs at prefent, able to eate of our falt prouifions, but my felfe and the Mafter of my Ship. It may be here remembred, that all this W inter wee had not beene troubled with any rhumes, nor flegmaticall difeafes. All this moneth the winde hath beene variable, but for the moft part Northerly.

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The foure firt dayes, it did fnow, haile, and blow very hard; and was fo cold, that the Ponds of water did freezeouer : and the water in our Cans did freeze in the very houfe: our clothes alfo that had beene wafhed and hung out to diy, did not thaw all day.

The fift, it continued blowing very hard in the broad fide of the Ship: which did make her fwag and wallow in her Docke for all fhee was funken : which did much fhake her. The Ice withall did driue againft her, and gaue her many fearefull blowes. I refolued to endeuour to hang the Rudder; and when God fent vs water, (notwithftanding the abundance of Ice that was yet about vs) to hane her further off: In theafternoone, we vnder-run our fmall Cable to our Anker, which lay a-Sterne in deepe water; and fo with fome difficaltie gate vp our Anker: This Cable had laine flacke vn-der-foot, and vnder the Ice, all the Winter : and wee could neuer haue a cleere flatch from Ice, to hauc it vp, beforenow; we found it not a iot the worfe. I put fome to make Colrakes ; that they might goe into the water, and rake a hole in the fands to let downe our Rudder.
The fixth, we went about to hang it. And our young laftieft men tooke turries, to goe into the water, and to rake away the fand: but they were not able to indure the cold of it halfe a quarter of an houre, it was fo mortifying : yea, vfe what comforts we could, it would make them fwound and dye away. We brought it to the Sternepof: but were then faine to gine it ouer, being able to worke at it no longer. Then we plugg'd vp the vpper holes, within boord: and fell to pumping the water againe out of her.

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The feuenth we wrought fomething about our Rudder, but were againe forced to giue ouer ; and to put out our Ca-blesouer-boord, with Meffengers vnto them: the Ankers lying to that paffe, that we might keepe her right in her docke, when we fhould haue brought her light.

By the eighth at night, we had pumpt all the water out of her: and fhee at a high water would fleet in her docke, though the were fill dockt in the fands, almoft fourefoot, This made vs to confider what was to be done. I refolued to heaue out all the Ballaft: for that the bottome of her being fo foakt all the winter, $t ~ h o p e d ~ w a s ~ f o ~ h e a u y, ~ t h a t ~ i t ~ w o u l d ~ b e a r e ~$ her. If we could not get her off that way, I then thought to cut her downe to the lower decke, and take out her Mafts : and fo with our Caske to Buoy her off.

The ninth, betimes in the morning wee fell to worke, we hoyft outour Beere and Cydar, and made a raft of it; faftning it to our fhoare-Anker: The Beere and Cydar funke prefently to the ground: which was nothing ftrange to vs; for that any wood or pipe-ftaues that had layne vnder the Ice all the winter, would alfo finke downe, fo foone as euer it was heaued ouer-boord: This day we heaued out tenne tunne of Ballaft. And here I am to remember Gods goodneffe towards vs: in fending thofe forementioned greene Vetches. For now our feeble ficke men, that could not for theirliues fiirre thefe two or three months, can indure the ayre and walke about the houfe : our other ficke men gather ftrengthalfo : and it is wonderfull to fee how foone they were recouered. We vfed them in this manner: Twice a day we went to gather the herbe or leafe of thefe Vetches, as they firt appeared out of the ground: then did we wahh and boyle them, and fo with $O$ yle and Vineger that had been frozen, we did eate them : It was an excellent furtenance and refrefhing : the moft part of vs ate nothing elfe : we would likewife bruife them, and take the Iuyce of them, and mixe that with our drinke: we would eate them raw allo, with our bread.
11. The eleuenth was very warme weather, and we did hang
our Rudder. The tydes did now very much deceiuevs : for a Northerly wind would very little raife the water. This made vs doubt of getting off our Ship.

The thirteenth I refolued of the Latitude of this place, fo that hauing examined the Infruments, and practifed about it this Fortnight, I now found it to be in 52 degrees, and 3 minutes.

The foureteenth wee had heaued out all the Ballaft, and carriedall our Yards, and euery thing elfe of weightaThoare, fo that we now had the Ship as light as poffible it could be.
The fifteenth we did litele but exercife our felues: feeing that by thistime, our men that were moft feeble, are now growne ftrong, and can runne about. The flefh of their gummes became fettled againe, and their teeth faftned: fo that they can eate Beefe with their Vetches.

This day I went to our Watch-tree: but the Sea (for any thing I could perceiue to the contrary) was ftill firme frozen: and the Bay we were in, all full of Ice, hauing no way to vent it.

The fixteenth was wondrous hot, with fome thunder and lightning, fo that our men did goe into the ponds a fhoare, to fwimme and coole themfelues: yet was the water very cold ftill. Here had lately appeared diuers forts of flyes : as Butterflyes, Butchers-flyes, Horfeflyes: and fuch an infinit abundance of bloud-thirfty Muskitoes, that we weremore tormented with them, then euer we were with the cold weather. Thefe (I thinke) lye dead in the old rotten wood all the winter, and in fummer they reviue againe. Here be likewife infinite company of Ants, and Frogs in the ponds vpon the land: but we durf not eate of them ; they lookt fo fpeckled like Toads. By this time were there neither Beares, Foxes, nor Fowle to be feene : they are all gone.

The feuenteenth, the wind came Northerly, and wee expecting a high Tyde, in the morning betimes, put out our fimall Cable afterne out at the Gun-roome-port : but the moming Tyde we hadnot water by a foot. In the Euening

I had laid markes, by ftones, \&c. and mee thoughts the water did flow apace. Making fignes therefore for the Boate to come a thoare; I tooke all that were able to doe any thing with meaboord : and at high water (although fhe wanted fomething to rife clecre out of her docke) yet we heau'd with fuch a good will, that we heaued her thorow the fand into a foot and a halfe deeper water. Further then fo, we durft not yet bring her, for that the Ice was all thicke about vs. After we had moor'd her, we went all to prayers: and gaue God thankes, that had giuen vs our fhip againe.

The 18 th. we were vp betimes : the Cooper, and fome with him, to fillfreth water: my felfe with fome others, to gather ftones at low-water; which we pyling vp in a heape, at high water the Cock-fwaine and his Ging, fetcht them aboord: where the Mafter with the reft food them. The Ship at low water had a great luft to the offing: by which meanes we could the better come and ftop the two vpper holes firmely : after which we fitted other conuenient places, to make others to finke her, if occafion were.

The ninteenth, we wereall vp betimes to worke, as afore fpecified: thefe two dayes, our Ship did not fleet: and it was a happy houre, when we got her off, for that we neuer had fuch a high Tyde all the time we were here. In the Euening, I went vp to our watch tree : and this was the firft time I could fee any open water, any way; except that little by the fhoarefide, where we were. This put vs in fome comforte that the Sea would fhortly breake vp: which wee knew muft bee to the Northward; feeing that way we were certaine, there was aboue two hundered leagues of Sca.
30. The 20 . we laboured as aforefaid. The winde at N. N.W. The tyde rofe fo high, that our Ship fleeted, and we drew her further off, into a foote and a halfe deepe water. Thus we did it by little and little; for that the Ice was ftill wonderfull thicke about vs.
22. The 22. there droue much Ice about $v s$, and within $v s$, and brought home our Sterne-Anker. At high water (notwithffanding
ftanding all the Ice) we heau'd our Ship furthes off: that fo The might lie aflote at low-water.

The next low-water, we founded allabout the Ship: and found it very foule ground, we difcouered fones 3 . foote high,aboue the ground, and 2. of them within a Ships breadth of the Ship: whereby did more manifeftly appeare Gods mercies to vs: for if when we forced her afhoare, the had ftrooken one blow againft thofe ftones, it had bulged her. Many fuch dangers were there in this Bay: which we now firft perceiued, by the Ices grounding and rifing againft them. In the Euening, we tow'd off the Ship, vnto the place fhe rid the laft yeere, and there moord her. Shering the Ship, night and day, flood and ebbe, amongft the difperft Ice that came athwart of vs.

The 23. we laboured in fetching our prouifions aboord: which to doe, we were faine to wade to carry it to the boate a full flight-fhot : and all by reafon the winde was Southerly. This morning, I tooke an Obferuation of the CMoones comming to the South, by a CMeridian line of 120, yards long: which I had rectified many weeks before-hand.

The 24. I tooke another Obferustion of the Moones comming to the CMeridian: for which I referre you to the obferrations in the latter end of this fournall.

Whereas I had formerly cut downe a very hightree, and made a Croffe of it, to it I now faftened (vppermoft) the Kings and Queenes Maiefties Pictures; drawne to the life: and doubly wrapt in lead, and fo clofe, tharno weather could hurt them. Betwixt both thefe I affixed his Maiefties Royall Titte: Viz. Charles the forft King of England, Scotland, France and Ireland: as alfo of New-found-land, and of thefe Territories, and to the Weftward, as farre as Novae Albion, and to the Northward to the Latitude of 80 . degrees, 8 cc .

On the out-fide of the lead, I faftened a fhilling and a fixepence of his Maiefties Coyne: vnder that, we faftened the Kings Armes, fairely cut in lead: and vnder that, the e Armes of the City of Briffoll. And this being CNidfummer-Day, we raifed it on the top of the bare Hill, where we had buried

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## The Wintering.

our dead fellowes: formally by this ceremony taking poffeffion of thefe Territories, to his Maiefties $v$ fe.
The winde continuing Southerly and blowing hard, put all the Ice vpon vs: fo that the Ship now rid amongft it, in fuch apparent danger, that Ithought verily we fhould haue loft her. We laboured, flood and ebbe, both with poles and oares, to heaue away and part the Ice from her. But it was God that did protect and preferue vs: for it was palt any mans vnderftanding, how the Ship could indure it, or we by our labour faue her. In the night, the winde fhifted to the Weftward, and blew the Ice from vs: whereby we had fome reft.
25. The 25 . in the morning, the Boate-f wayne with a conuenient crue with him, began to rigge the Ship: the reft fetching our prouifions aboord. About 10 , a clocke, when it was fomething darke, I tooke a Lance in my hand; and one with me witha Musket and fome fire, and went to our watch-tree; to make a fire on the eminenteft place of the Iland: to fee if it would be anfwered: Such fires I had formerly made, to haue knowledge if there were any Saluages on the maine or the Ilands about vs. Had there beene any, my purpofe wasto haue gone to them, to get fome intelligence of fome Chriftians, or fome Ocean Sea thereabouts. When I was come to the tree, I laid downe my Lance, and fo did my Confort his Musket : and whileft my felfe climed vp to the top of the tree, I ordered him to put fire vnto fome low tree therabouts. He , (vnaduiledly) put fire to fome trees that were to windward: fo that they (and all the reft too by reafon it hadbeene very hot weather) being feare and dry, tooke fire like flaxe or hempe : and the wind blowing the fire towards me, I made hafte down the tree. But before I was halfe way down, the fire tooke in the bottome of it, and blazed fo fiercely vpwards, that I was faine to leape off the tree, and downe a fteepe hill, and in briefe, with much adoe, efcaptburning. The moffe on the ground was as dry as flaxe: and it would sunne moft frangely, and like a traine along the earth. The Musketand the Lance were both burat. My Confort at laft
came to me, and was ioyfull to fee me: for he thought verily I had bin burned. And thus we went homeward together, leauing the fire increafing, and ftill burning moft furioully. We could fee no anfwer of it. I llept but little all nightafter: and at breake of day, I made all our Powder and Beefe, to be carried aboord. This day, I went to the hils, to looke to the fire : where I faw how it did ftill burne moff furioully: both to the Weftward, and Northward : leauing one vpon the hils to watch it, I came home immediately, and made them take downe our new fuite of fayles, and carry them to the feas-fide, ready to be caft in, if occafion were, and to make hafte to take downe our houfes. About noone, the winde fhifted Northerly; and our Sentinell came running home, bringing vs word that the fire did follow him at hard heeles, like a traine of powder. It was no neede tobid vs take downe and carry all away to the fea-fide. The fire came towards vs with a moft terrible rattling noyfe: bearing a full mile in breadth: and by that time wee had vncouered our houfes and laid hand on, to carry away our laft things : the fire was come to our Towne and feazed on it, and (ina trice ) burnt it downe to the ground. We loft nothing of any value in it : for we had brought it all away into a place of fecurity. Our dogges, in this combuftion, would fit downe on their tayles, and howle, and then runne into the Sea, on the fhoalds, and there ftay. The winde fhifted Eafterly: and the fire ranged to the Weftward, feeking what it might deuoure. This night, we lay all together aboord the Ship, and gaue God thankes, that had Shipt vs in heragaine.

The twentie feuen, twentie cight, and twentie nine; wee wrought hard, in fetching our things aboord, as likewife our water, which we maft towe off with the ebbe, and bring it to the Ship with the flood. Moreouer, we muft goe about the Eafter-point for drift-wood:for our tooles wereall forpent, that we could cutnone. Wherefore, about fome three dayes agone, I had caufed our Pinnace to be fawed to pieces, and with that we flowed our Caske, intending to burne it at
low waters, and fuch other times, as we could not worke in carrying things aboord. I employed the men in fetching ftones: and we did build three Tombs ourer our three dead fellowes; filling them vp with fand in a decent and handfome fafhion. The leaf Tombe, had two tunnes of fones about it.

The thirtieth, we moft earnefly continued our labour : and brought our fayles to yard: and by eleuen a clocke at night had madea priddy Ship: meaning to haue finifhed our buffneffe with the weeke and the moneth, that fo we might the better folemnize the Sabbath afhoare to morrow, and fo take leaue of our wintering Iland.

The winde hath been variablea great while : and the Bayes are now fo cleere of Ice, that we cannot fee a piece of it: for it was all gone to the Northward. Hoping therefore that it giue content to fome Readers: I will relate the manner of the breaking of it vp. It is firf to be noted, that it doth not freeze ( naturally) aboue fixe foot : the reft, is by accident. Such is that Ice that you may fee here, fixe faddome thicke. This we had manifeft proofe of, by our digging the Ice out of the Ship: and by digging to our Ankers, before the Ice broke vp .

In May, when the heate increafeth, it thawes firf on the Thoald by the Choare fide : which when it hath done round about, then the courfes of the tydes (as well by the ebbe and flood, as by their rifing and falling) doe fo fhakethe maine Ice, that it cracks and breakes it. Thus, when it hath gotten roome for motion; then rumnes one piece of it vponanother: and fo bruifes and grinds it felfe againft the fhoalds and rocks, that it becomes abbreuiated, infomuch that a Ship may haue well paffage thorow it. Befides this; much of it is thruft vpon the fhoalds, where it is much confumed by the heate of the Sunne. The feafon here in this Climate, ismoft vnnaturall : for in the day time, it will be extreme hot: yea not indurable in the Sumne, which is, by reafon that it is a fandy countrey. In the night againe, it will freeze an inch thicke in the ponds, and in the tubs about and in our houfe : And all this, towards the latter end of Iune.

The CMuskitoes vpon our comming away, were moft intolerable. Wee tore an old Auncient in pieces, and made vs bagges of it to put our heads in ; but it was no fortification againtt them. They would finde wayes and meanes to fting vs, that our faces were fwolne hard out in pumples, which would fo itch and finart, that we muft needs rubbe and teare them. And thefe flyes, indeed, were more tormenting to vs , then all the cold we had heretofore indured.

Inty. 1632.
The firft of this month being Sunday, we were vp betimes. And I caufed our Ship to be adorned the beft we could : our Ancient on the Poope, and the Kings Colours in the maine top. I had prouided a fhort briefe of all the paffages of our voyage to this day: I likewife wrote in what fate we were at prefent, and how I did intend to profecute the difcouery, both to the W eftward, and to the Southward, about this Tland. This Briefe difcourfe I had concluded, with a requeft to any Noble minded Trauaylor that fhould take it downe, or come to the notice of it : that if we fhould perifh in the Action, then to make our indeuours knowne to our Soueraigne Lord the King. And thus with our Armes, Drumme and Colours, Cookeand Kettle, we went afhoare, and firft we marcht vp to our eminent Croffe, adioyning to which we had buried our dead fellowes. There we read morning prayer, and then walked vp and downe till dinner time. After dinner we walkt to the higheft Hils, to fee which way the fire had wafted. We defcryed that it had confumed to the Weftward, fixteene miles at leaft, and the whole bredth of the Iland: neere about our Croffe and dead, it could not come: by reafon it was a bare fandy Hill. After Euening prayer, I happened to walke alongt the Beach fide : where I found an herbe refembling Scuruy-graffe. I made foime to begathered: which we boyld with our meate to fupper: It was moft excellent good, and farre better them our Vetches After fupper we went all to feekeqand gather more of
it : which we did, to the quantity of two bufhels which did afterwards much refrefh vs: And now the Sunne was fet, and the Boat comne afhoare for vs: whereupon we affembled our felues together, and went vp to take the laft view of our dead, and to looke vnto their Tombes, and other things: here leaning vpon mine arme, on one of their Tombes I vttered thefe lines, which though perchance they may procure laughter in the wifer fort (which I fhall be glad of) they yet moued my young and tender-hearted companions at that time with fome compafion. And thefe they were.

IWere vnkind, vnleffe that I did fhead, Before I part, fome teares vpon our dead: And when my eyes be dry, I will not ceafe In heart to pray, their bones may reft in peace: Their better parts, (good foules) I know were given, With an intent they fhouldreturne to heauen. Their lines they fent, to the laft drop of bloud, Seeking Gods glory, and their Countries good, And as a valiant Souldier rather dyes, Then yeelds his courage to his Enemies: And ftops their way, with his hew'd flefh, when death Hath quite depriu'd him of his ftrength and breath : So haue they fpent themfelues; and here they lye, A famous marke of our Difconery.
We thatfuruiue, perchance may end our dayes
In fome imployment meriting no praife;
And in a dung-hill rot : when no man names
The memory of vs, but to our fhames.
They haue out-liu'd this feare, and their braue ends, Will euer be an honour to their friends. Why dropye fo, mine eyes? Nay rather powre My faddeparture in a folemne fhowre. The Winters cold, that lately froze our bloud, Now were it fo extreme, might doe thisgood, As make thefe teares, bright pearles : which I wculd lay, Tomb'd fafely with you, cill Doomes fatall day.

## The Wintering.

That in this Solitary place, where none
Will eucr come to breathe a figh or grone,
Some remnant might be extant, of the true
And faithfull loue, I euer tenderd you.
Ob , reft in peace, dearefriends, and let itbe
No pride to fay the fometime part of me.
What paine and anguifh doth affliet the head,
The heart and ftomake, when the limbes are dead:
Sogrieu'd, I kiffe your graues : and vow to dye,
A Fofter-father to your memory.
Farewell.
So faftning my briefe to the Croffe, which was fecurely wrapt vp in Lead:we prefently tooke Boat and departed: and neuer put foote more on that Mland. This Mland and all the reft, (as likewife the maine) is a light white fand; couered ouer with a white moffe,and full of fhrubs and low bufhes: excepting fome bare hils, and other patches. In thefe bare places, the fand will driue with the wind like duft. It is very full of trees, as Sprufe and Iuniper: but the biggeft tree I faw, was but a foote and a halfe ouer. At our firft comming hither, we faw fome Deare and kild one: but neuer any fince. Foxes, all the winter we faw many, and kild fome dozen of them : but they went all away in May. Beares we faw but few, but kild none : we faw fome other little beafts. In May there came fome fowle, as Duckes and Geefe : of which we kild very few. White Partridges we faw; but in fmall quantities: nor had we any fhot, to fhoot at them. Fifh we could neuer feeany in the Sea: nor no bones of filh on the fhoare fide : excepting a few Cockle-fhels: and yet nothing in them neither. Other things remarkeable I haue before mentioned.


## Inly, 1632.



Vnday being the fecond of Iuly, we were vp betimes: about Stowing and fitting our Ship, and waying of our Ankers, which when the laft wäsa-trippe, wee went to prayer, befeeching God to continue his mercies to vs, and rendering him thanks for hauing thus reftored vs. Our Ship we found no defeet in; we had abundance of fuch prouifions, as we brought out of England: and we were in indifferent heaith, and did gather ftrength daily. This being done, we wayed, and came cheerefully to fayle. The winde at North-weft, bad to get away. Wherefore we Itoodouer to Danby Iland, to take in more wood; and there to be ready to take the opportunitie of a faire winde. I went athoare my felfe with the Boate: for that fome of the company had told me, they had feen forme fakes the laft yeer drouen into the ground. When we came afhoare, whileft fome gatherd wood, I went to the place: where I found two ftakes, drouen into the ground about a footeand a halfe, and fire. brauds, where a fire had beene made by them. I puld vp the ftakes,
ftakes, which were about the bigneffe of my arme ; and they had beene cut fharpe at the ends, with a hatchet, or fome other good Iron toole, and driuen in as it were with the head of it. They were diftant about a ftones-throw, from the water fide. I could not conceiue, to what purpofe they Thould be there fet ; vnleffe it were for fome marke for boats. This did augment my defire, to fpeake with the Saluages: for without doubt they could haue given notice of fome Chriftians, with whom they had fome commerce. About 4 . in the Euening, I returned aboord with a boats lading of wood: and the winde fomething fauouring, we wayde; with our lead feeking out a Channell amongit thefe perilous fhoalds. In the Eurening, the winde oppofing it felfe; we came to Anker betwixt Charleton Iland, and that Iland we named the laft yeere, (in memory of that Honourable Gentleman Mafter Thomas Carie, one of the Bed-chamber to the King) Carries Iland: where we rid all night.

The 3. at breake of day, we wayde with a bare winde, and founding vp and downe for a Channell, we were many times in 5 and 4 fad. water. The winde larging vpon vs, we flood away Weft : by noone, we faw all Ice to the North-ward of vs. Indeauouring, therefore, to compaffe aboutthe Wefterpoint of Charleton Iland: and fo to feeke to the Southward: We found it all fhoalds, Rockes, and breaches. By 4 . in the afternoone, we faw the Weftern-land; but all full of Ice: whereupon, as the wind fauoured vs, we ftood alongit it in fight to the North-ward.

The fourth was calme, but fo very thicke fogge withall, that we could not fee a Piftoll-hot about vs. Wherefore we came to an Anker, and there rid all this day and the next night.

The fift, at three in the morning, we waide : but Ice being all about vs, we knew not which way to turne vs now to avoide telling the fame thing 20 , times: we were continually, till the 22. fo peftered and tormented with Ice; that it would feeme incredible to relate it: fometimes we were fo blinded with fogge, that we could not fee about vs : and be-
ing now become wilfull in our indeauours, we fhould fo ftrike againft the Ice, that the fore-part of the Ship would cracke againe; and make our Cooke and others to runne vp alf amazed, and thinke the Ship had beene beaten all to pieces. Indeed we did hourely ftrike fuch vnauoidable blowes, that we did leaue the hatches open, and 20. times in a day, the men would runne downe into the hold, to fee if thee were bulged.

Sometimes, when we had made her faft in the night, to a great piece of Ice; we fhould haue fuch violent ftormes, that our faftning would breake : and then the ftorme would beate vs from piece to piece moff fearefully: Other-while, we fhould be faft inclofed amongft great Ice, as high as our poope. This was made (as I haue formerly faid) by one piecerunning vpon another: which made it draw 8. or 10. fad. water. Befides which, the lower-moft would rife from viderneath, and ftrike vs vnder the bulge, with pieces of 5. 6. yea of 8. tunne, that many times we have pumpt cleere water for an houre together, before we could make the pumpe fucke. Amongft thefe feuerall and hourely dangers, Iouer-heard the men murmure; and fay that they were happy that I had buried: and that if they had a thoufand pounds, they would giue it, fo they lay fairely by them : for we (fay they) are deftined to farue vpon a piece of Ice. I was faine to indure all this with patience : and to comfort them vp againe, when I had them in a better humour.

The 22, hauing beene vext with a forme all laft night,and this morning i ith a thicke fogge; we droue in 13 . Faddome water. About noone, it cleer'd; and we faw the land: and at the inflant, had a good obferuation: whereby we knew it to be Cape Henreetta Maria. I made the Mafter ftand in with it; and in the meane time we fitted a Croffe, and faftened the Kings Armes, and the Armes of the City of Brifoll to it; we came to an Anker within a mile of the fhoare, in $\sigma$. fadd. water : fo we hoyft out the boate, and tooke our Armes and our Dogs, and went afhoare. Vpon the moft eminent place, we erected the Croffe: and then feeking about, we foone
faw fome Deere; and by and by more and more. We fole to them with the beft skill we had, and then put our Dogs on them: but the Deere rame clecre away from them at pleafure. We tyred the Dogs, and wearied our felues, but to no purpofe : neither could we come to fhoote at them. I faw in all, about a dozen (old and young) very goodly beafts. We tooke halfe a doozen young Geefe, on the pooles, by wading in to them; and for returned to our Boate vext, that now we had found a place where there was refrefhing, and we could get none of it. Whereas, therefore, we had kept our Dogs with a great deale of inconuenience aboord the Ship, all the winter ; and had pardoned them many mifdemeanors,( for they would ftealc our meate out of the fteeping tubs) in hope they might hereafter doe vs fome feruice: and feeing they now did not; and that there was no hope they could hereafter: I caufed them to be left afhoare. They were a Dogge and a Bitch: Bucke Dogs, of a very good race. The Dogge had a collar about his necke, which it may be hereafter, may come to light. I did fee no figne at all, of any Saluages : nor could we finde any hearbs, or other refrefhing here.

In the Euening, (being returned aboord) and the winde blowing faire at South; I caufed the Mafter to weigh, and come to faile, and to lofeno time. For we did hope for an open Sea to the North-weft. This Cape hath a very fhoald point, that lies off it: which we indeauoured to compaffe about.

Sayling thereforeamongft fhattered Ice, we came to very fhoald water, ( 4 . and 5 . faddome deepe) and could not anoyde it. Atlength, ftanding North, the water deepened; but we -came withall amongft great pieces of Ice; which by reafon of fome open water, there went a pretty fea. Thefe hard pieces of Ice, made a moft fearefull noyfe. It proued a faire Moone-fhine night: otherwife it had gone ill with vs. We turned amongtt this Ice, flaying the Ship fometimes within her length, of great pieces, as bad as Rockes: but by reafon we were often forft to beare vp , we did fagge vpon the maine rand of Ice, and that we thought would it be worfe for vs; wee let fall an Anker, and food all on the decks to watch the Ices fheering of the Ship, (to and againe) to auoyd it. Thus hauing poles and oares to fend it, we could not keepeour felues fo cleere, but many pieces came foule of vs. Wc brake two of our great poles with it : which were made to be handled by foure men, befides fome other dammages. At breake of day, we wayed; and foughtall wayes to cleere our felues of Ice : but it was impoffible. I conceiue it impertinent to relate euery particular dayes paffages; which was much alike to vs. Our endeaucurs were fometimes with our fayles; giuing and receiuing 500 . fearefull blowes in a day. Sometimes, we would ftop at an Anker, when we could get a little open water: and fo fuffer the Ice to driue to Leeward: Other-whiles, we fhould be inclofed amongft it; and then it would fo breake, andrife, and leape vp vnder vs ; that we expected to be beaten euery houre to pieces.

Morcouer; wee fhould haue fuch ftormes in the darke nights, that would breake the moorings we had made faft to fome piece of Ice for fecuritie in the night feafon: and then we fhould beat moft dangeroufly from piece to piecetill daylight, that we could fee to make her faft againe. I forbeare to fpeake of thicke fogges which we had daily; which did freeze our Rigging day and night: Befides all which, wee Should come into moft vncertaine depths: fometimes 20. faddome : next caft 10 . next 15, then 9 . Rocky fouleground. The great deepe Ice withall, driuing on thefe vncertaine depths, did fo diftra? the tydes, and deceiue vs fo much in our accounts, that by the thirtieth we were driuen backe fo farre, to the Eaftward, andto the Southward of the Cape; that at fiue a clocke in the euening, it bare North-weft of vs fome three leagues off, contrary to our expectations. W ith all thefe mifchiefes, our Ship is now becomne very leaky: that we muft pumpe euery halfe watch. Here I called a confultation: and after confideration of all our experience, we were all of the fame opinion; that it was impoffible to get to the Northward, or to the Eaftward; by reafon of the Ice.

Wherefore. I refolued vpon this courfe: When the winde blew South, it would blow the Ice off the South fhoare, then we would feeke to get to the Weftward, betwixt it and the fhoare. I muft confeffe that this was a defperate refolution: for all the coaft we knew to be fhoald and foule ground, all rocks, and ftones : fo that if the winde fhould fhift to the Northward, there would be (without Gods mercies) little hope of vs. But here we muft not ftay: The nights grew long; the cold fo increafed, that betwixt the pieces of Ice, the Sea would be frozen. I caufed the Ship to be fitted, and places conuenient againe prepared to finke her the fecond time, if fo be we were put to extremities. We prefently put our proiect in execution (the winde being at South ) and got about the fhoalds of the Cape; ftanding then into the fhoareward, to get betwixt it and the Ice: we came into foure faddome water (very foule rocky ground) thinking to come to an Anker all night, and let the Ice driue to Leeward. But ftill there was fo much Ice betwixt vs and the fhoare, that we were faine to beare vp amongft it into deeper water, and tolet the Ship driue amongft it. The winde increafing, we endured a moft dangerous darke night of it. In the morning, we fell to worke, to get the Ship againe out of the Ice into fome cleere water, which we faw Weft by South of $v s$. Some of our company out vpon the Ice, to heaue her with their fhoulders : whileft others ftood aboord with poles. The reft food to fill and fill the fayle. By nine in the morning, we had gotten into fome cleere water: and ftood W eft and by South ; and into foure faddome water, foule ground. But being not able to weather fome rands of Ice, which did driue ; wee were faine to ftand off againe, and (when the euening grew darke ) to come to an Anker.

About midnight, there came a great picce of Ice, (which we could not auoyd) athwart of our Cable; and made the Ship driucand dragge her Anker. This droue her into thoald water, it being very rocky and fonle ground. We brought the Cable to Capttang, and heau'd with fucha courage, that we heau'd home our Anker from vnder it. Thus we did endeauour ten faddome water. It then pleafed God, that the wind blew alongft the fhoare: otherwife it had gone far worfe with vs.

## Auguff. 1632.

1. The firft of this moneth at breake of day, when we could fee a little about vs, we fell to ftruggle and ftriue againe with the Ice; and to get in neerer to the fhoare. There, by reafon the winde was oppofite to come to an Anker, we letthe Ice driue to Leeward: hoping that there was a cleere Sea to the Weftward. The Ice droue very thicke vpon vs, and one piece came foule of VS; which did touch our Spreet-fayle Yard, and made the Ship driue: But we foone cleered our felues of it. Then we wayed, and food in neerer to the fhoare: bur the water fhoalded, and there were fo many great rands of Ice betwixt vs and the fhoare, that there was no comming to an Anker. So wee turned betwixt the Ice: many pieces of it being aground in fhoald water; and few pieces diftant one from the other a Cables length. This day, we faw two Sea Morfes on the Ice.
2. The fecond in the morning, we were glad of the breake of day : haning moft dangerounfy turn'd amongft the Ice all night, and endured many a heauy blow. We food in againe to the fhoare-ward; to fee if we could get fome cleere water: for to the Northward it was all impaffable Ice. We floud into fiue aad foure faddome : but ftill all incompaft with Ice. So we ftood off againe into deeper water : and in the Euening we were inclofed amongft extraordinary great pieces. It was a very thicke fogge withall: fo that we made fart the Ship to a great flat piece, and went to fleepe and refrefh our felues after our extreme paines taking.
3.4.85. The third, fourth and fift, wee were inclofd amongtt very great Ice: and itblew fuch a forme of winde, that we fomectimes indeuouring to get forward to the W eftward, did frike fuch heauy blowes, that made all the forepart of the Ship cracke againe. Then we would giue ouer working
and lether alone amongf it ; but then the Ice would breake and rife vnder vs, that would indanger as bad vs as the former. Our fhip doth make aboue a tun of water euery watch, which we muft pumpe our, befide our other labour. God thinke on vs,and be mercifull to vs amongft all thefe dangers.

The fift at noone, we were in Latitude 55.30 . The Cape bearing off vs South-Eaft, by Eaft, fome twelue leagues off. And this is all we haue gorten, fince the ewo and twentieth of Iuly. All nightitblew a violent gale of wind, at Weft, North-Weft : and about midnight, our hawfer (by which we had made faft to a piece of Ice )broke, and we loft 14. faddome of it. We beat all night moft fearefully, being toft from piece to piece, becaufe that in the darke we durft not venture our men to goe forth on the Ice, for feare of lofing them.

All the fixth, the forme indured, and droue vs againe with the Ice, almoft to the Cape.

The feuenth was the moft comfortableft day wee had, fince we came out of our wintering place; the wind came vp faire at Eaft; and we got (although with our former inconueniences and dangers) neerer to the fhoare, and into fome open water, making good way to the W eft-ward. Moreouer, our leake now ftopt of its owne accord: fo that now we pumpt but little. We fayld all night; keeping good watch on the forecaftell: bearing vp for one, and looffing for another.

Thusdid we the eighth alfo, but then the wind fhifting to the North-weft, it droue the Ice on the fhoare : and we came to an Anker, in eight faddom water. The maine Ice, we had fome two mile to windward of vs: but the fet of the tyde kept it off from vs. At noone we were in Latitude 55.34 . In the Euening, a range of Ice droue vpon vs, which made vs weigh, and fand in neerer the Thoare, into fixe faddom, and there to come to an Anker. Tha wind increafingabout midnight, the Ship did driue, and was quickely in fiue faddom water: wherefore wee let fall our Shoot-Ankes; and boch held her. But that that trou- bled $v s$, was, that we expefted eucry minute, when the maine Ice would come vpon vs : and then there would be no hope, but to be put afhoare.

The ninth, in the morning, we waide our fecond Anker : the Ice being within leffe then a mile of vs. About eight in the morninga point of it came foule of vs : which we preuented, by waying, and came to an Anker in three faddom and a halfe water. The wind continued North North-Weft, which was in on the fhoare. This morning, I caufed all our empty Caske to be fild with water, and the Ship to be left vupumpt: and the places lookt to, that we had prepared to finke her. For we wereat prefent in as apparent danger, as any rime this voyage: and (to our great gricfes) it was all foule rocky ground. The danger of this was, if we made faft to apiece of Ice that drew deepe water; then, as foone as it came to ground on thefe rockes, it would breake all to pieces, and betray vs to our deftrution. About noone, there came foule of vs the point of a range of tce; which we refolued to indare the extremity of, withan Anker: thinking toride, andbreake through it, we now perceiaing fome open water beyond it. Thrufting therefore, and fending with our poles; atlaft a great piece came thwart our hawfer, and there went a pretty Sea amongit it. The Ship did now fall yponit fo violently, that I expectedenery blow, fhe would beate our her bowes. At length, fhe did drine with it, fo that Ithought the Cable had bin broken. We brought it to Capftang ro heaue it in: but found that our Shoote-Anker was broken in the middle of the fhanke. We prefently fet our fayles thereupon: indeururing that way to edge in amongt the Ice off of this perilous ihoare. It pleated God to fauour our labour fo , that by eight in the Enening wee got off into feuen faddom : and a darke night comming on, we made faft to the biggeft piece we could find. It blew fairely all night: butabout midnight, the wind came vpat North, which was more on the fhoare then before. By breake of day, on the tenth, we were driuen into foure faddom, very foule ground: fo that the lead did fall off the rocks three or foure foote,
we fet our failes, and vfed our vetermoft indenours to edge off. Some of vs went vpon the Ice to hale her: others ftood with poles tothruft by night. At night we had gotten off, into eight faddom: and made faft to the biggeft piece we could find. If any man fhould aske why we now kept fo neere to the fhoare, in this continuall danger: I anfwer; Becaufe that in the offing, the Ice was fo extraordinary thicke, that we could make no way, any way through it. Moreouer, when we were in that great thicke Ice, and that the winde came upfaireatSouth or South-Eaft or Eaft, we could not get out of it. Wherefore we chofe to runne thisaduenture; and fo preuent and ouercome all dangers with Gods affiftance and our extreme labour.

The cleuenth inthe moming was a thicke fog: yet there fprungvp a gale of wind at Eaft : and we made in for the fhoare.

From the eleuenth till the foureteenth, the winde continued faire : and we made all the faile we could (nightand day) as the Ice would fuffer vs. We bad the Choare in fight by day, on one fide, and the Ice within two miles, on the other: and we faild amongft difperft pieces; luffing for one, and bearing vp for another.

The 14. at noone, we were in Latitude 57. 55. In the Eue-
II. ning, we were imbayed in Ice; and ftood S. W. to cleere our felues of it, but could not. But feeing from top-maft head, cleere water ouer it, we put into it: but there rofe a very thicke fogge, and night came on withall, that we were faine to faft to a piece of Ice, expecting day and better weather.

The 15 . in the morning, (although the fogge was very thicke) we indeauoured to get out of the Ice, and ftood away Weft: but within 2 . houres the water fhoalded from 40. faddome to 25 . whereby we knew that we had the fhoalding of the Weftern-fhoare. Then we fhapte our courfe to the Northward; the fogge continuing fo thicke, that we could not fee a Piftoll-fhot about vs. We had not ftood this way 2. houres, but we heard the rut of the Ice a-head of vs, which made the molt hideous noyfe, of any we had $\mathrm{N}_{2}$ heard to the Weft-ward, in this day darkneffe: hearing of it fometimes, and fometimes feeing of it: which was very large, deepe, and high Ice, aboue the water. We weathered it all, except fome few pieces, and got into open water. About Sunne-fet, there came a fudden guft at N. N.W. and before we could handle our fayles, it was with vs, and put vs to fome trouble. It dallied with vs by gufts, till 9 . a clocke : and then it fell into a moft violent ftorme. We confidered where we might haue the cleereft drift: and fo tooke in all, and let her driue, her head to the Thoare-ward. Before mid-night, the water fhoalded on vs, to 15 . fadd. Then we turnedher head to the Eaftward: and fet our maine Courfe low fet, but as much as the could indure. The water decpned but little; and we knew that we were on thofe rockie Choalds, which we ftrooke on the laft yeere. Godbe mercifuil to vs. Here was the firft great breaking Sea that we had this yeere.

The 16 . in the morning, we were driuen to a great Rand of Ice; to avoyde which, we fet our fore-courfe too: and ftood to the fhoare-ward, in 13. fad. water: and then about againe. We ftood in, a mile into the Ice: but there went fuch a great fwelling Sea in it, that it was not indurable: fo we ftood out againe. About 3 . a clocke in the afternoone, the ftorme broke vp; and blew faire at N. W. which prooued good for vs: for we had not drife for 4. houres: Befides, it was but 3 . leagues betwixt the fhoalds and the ice. We fet all our fayles, and indeauoured to weather the Ice : but in the Euening we were ftill peftered with it. By mid-night, we knew not which way to turne; nor what to doe: fo we tooke in all our fayles, and let her driue amongft it. The Ice beat vs on ettery fide: for there went amongtt it a very great full Sea.

The 17 . in the morning, when we could fee about vs; we were in the middeft of the Ice: but with the laft ftorme it was all broken into mammocks, as big as a boate of 3 . or $4^{\circ}$ Tunnes, which did giue vs many a heauy blow in the darke night. If this ftorme had taken vs amonglt it, it had beatens
ws all to pieces, without Gods mirachlous preferuation. We made fayle, and indeauoured to clecre our felues of it to the North-ward, which by 8. in the morning, we had done.

We then went to prayer, and gaue God hearty thankes, that had deliuered vs out of it. For we were hourely, for the fpace of fixe weekes, as it were in the Iawes of death: yea neuer any (that I haue heard of) haue beene fo long, in fuch long nights, vpon a foule fhoald fhoare, tormented with Ice, as we haue now beene. At noone we were in Latitude 58. 20.

Now as touching the diffolution or ruining of the Ice; we found that this forme had torne and fhattered this Rande of Ice, which was on the outfide : although it muft hauea long time, to worke into the maine body of it. I have in Iuly, and in the beginning of Auguff taken fome of the Ice into the Ship; and cut it fquare, 2 . foote, and put it into the boate, where the Sunne did thine on it with a very frong reflexe about it. And notwithftanding the warmth of the Ship: (for we kept a good fire) andall our breathings, and motions; it would not melt, in 8 . or 10. dayes.

It was our practice when we fhould be two dayes together faft to a piece of Ice, to fet markes on it, to fee how it did confume : but it yeelded vs fmall hope of diffoluing. We could not in that time, perceive any diminution by the finking of it or otherwife. Neuertheleffe, I thinke that it is ruined with ftormes, or confumed with heate fome yeeres: or elfe the Bay would be fild choke-full: But I confeffe, that thefe fecrets of nature are paft my apprehenfion.

Being out of it (but no otherwaies then that we yet faw it from off the deckes, all to the Eaftward) I ordered the Mafter to ftere away Northand by Eaft, keeping the fhoaldivg of the Wefter-fhoare.

The 18. at noone, we were in Latitude 59.30.
18.

190 the N. by E. and at noone were in Lat. 6x. 7. fome 12 . leagues off the fhoare. I ordered the Mafter, to Chape his Swass-neff, and Nevitra.
20. The 20. we were in Latitude 61. 45. This day we faiv fome few Seales about the Ship.
21. The one and twentieth the water fhoalded; fo that we made account we did approach the land: but about noone, the wind came vp at N.E. our direct oppofite. We looft as neere it as we could, and as it larg'd, we came to fland Eaft, and Eaft andby North.

The two and twentieth, we fell with the land to the Weft-ward of Caries Swams-neft : Where we had forty faddome, three leagues off. We food in, within a league of the Thoare, into thirteene faddome: and feeing the land to the South-ward of vs, we compaft about it: it being Caries Swans-neff : which is in Latitude 52. degroo. Minutes.
23. All the 23. we fayled North-Eaft ; and for the mof part in fight of land.
24. The foure and twentieth at noone, (by Iudgement) we were in Latitude 63.30 . hauing fayld a North-Eaft courfe. All this day was a very thicke fog : which about one a clocke, cleerda little : fo that I expected to feethe land. Some of our men being better fighted, fpyed it out about fome two leagues off from vs. I knew it could be no other then Nottingham Iland: though it were fomething contrary to the expectation of our beft Marriners. We ftood into it to make it. It was the North end of it: and it bare off vs, due Eaft. I was foone affured of it; and I ordered the Mafter to fhape his courfe North-W eft, and by North. Both he and others were vnwilling: but without much adoe, fubmitted themfelves: (how loth fo euer) for that it was fo very foule thicke weather. The reafons of my refolution were thefe: The time of the yeere was far fpent; and the difcommbdities of Winter came vponvs : and therefore would I make the fhorteft way, betwixt the lands already difcouered. If I foundan apen Sea, I had my defire, and did then intend to proceed to the vttermoff of our power: if we met with the land, I Chould

Thould then finifh the difcouery: it being not paffing fifteene leagues from land to land, and not paffing tenne leagues from Nottingham Iland, to the maine of the North fhoare. We made what fayle we could; it blowing a very ftiffegale of wind untill eight in the Euening: then it began to blow fiercely: and we tooke in our topfayles, and ftood vnder our two courfes and Bonnets. At nine, it blew a violent forme at South, South-Eaft, fo that we tooke in our forefaile, and let herdriue North-W eft. All the night it contimued an extraordinary ftorme: fo that we heaurd the Leade, cuery halfe watch: But the Ship diddriue fo faft, that the would be paft the Leade, before there was twenty faddom of line out, all the nightbeing exceeding cold withall.

The fiue and twentieth, the ftorme continued in his vttermoft malice, and did fo perplexe $v s$, that there were but few that did fleepe or eate a bit thefe twenty foure houres. About fixe a clocke in the afternoone, the Storme began to flakensyet blew there a fierce gale of wind betwixt the South and South-Weft. We food Weft, North-Weft, and made a North-W eft way, when fuddenly the Sea became very imooth. We reafoned thereupon amongt our felies, what might be the caufe of it. VVeall thought it, to be the Leeward tyde; nothing doubting what afterwards we encountered. TheShip had very quicke way in this fmooth water.

The fixe and twenticth, by two a clocke in the moming, we were fuddenly come in amongt the Ice: and it pleafed God, that the Moone at the inftant gaue vs fo much light, that we could feea little about vs. We would haue flaid the Ship, but it was fo thicke to wind-ward, and fo neere $v s$, that we durft not. Wee then bore vp in this vnexpected accident; and (I verily belecue) did not fcape ftriking, the length of a foote, againft the Ice as hard as rockes, two or three times: the Shippe now bauing way, after twelue leagues a watch. Then wee ftood clofe by a wind to the Eaftward; expecting day, that wee might fee about vs. Wee could from top-matt head fee the Ice to the North North-W eft, the North-weft, and fo round about by the South, to the Eaft, it. This frooke vs all intoa dumpe: whereupon I called a confultation of my Affociates: namely, eArthrr Price, Mafter: William Clements, Lieutenant; Iohn Whittered, Mafters Mate; Nathaniel Billon, Chirurgion; and Iohm Palmer, Boatefwayne: requiring them to aduife and counfell mee, how to profccute our bufineffe to effecq. Thefe all went together, and reafoned amongft themfelues; and then brought me their opinions in writing, vnder their hands:

Videlicet, Our aduice is, that you repaire homeward, from this prefent twentie fixth: and that for thefe reafons. Firft, for that the nights are long and fo extreme cold withall; that wecan hardly handle our fayles, and riggings. Secondly, the times are now fubiect to ftormy and gufty weather : as witneffeth the prefent feafon: it hauing continued a forme ener fince the twentie fourth, and doth yet continue, no weather to difcouer in. Thirdly, we doubt whether HudJons Seraights be fo cleere of Ice, that it may be paffable in conuenient time: (winter comming now on apace) before we be frozen vp: reeing the Ice lyes here all ouer the Sea in rands and ranges. Fourthly, wee muft haue a fet of faire weather, to paffe the Straight; which we may ftay along time; for, if wenegleqt the firft opportunity. Fiftly, for that our Ship is very leaky, fo that in foule weather we are faine to pwimpe enery glaffe: which is great labour. Moreouer, we know her tobe fo forcly bruiFed with rocks, and blowes of the Ice; that fhee is no more to be aduentur'd amongft it, but in fauing of our liues homewards. Befides all this,our men grow very weake and fickly, with extreme labour.

Sixthly, the feafon of the yeere is fo farre fpent, that we can expect no other weather, then we haue had; both lately and at prefent: That is to fay, frow and fogge; freczing our rigging, and making euery thing fo flippery, that a man can fcarce fand: And all this, with the winde Southerly; which if it hould come to the Northward; then we are to expect farre worfe. Seuenchly and lafly, that the Ice lyes all in thicke
rands and ranges, in the very way we fhould goe: as you and all men here may fee. And therefore wee conclude, asaForefaid ; That there is no poffibilitie of proceeding further : wherefore we here counfell you to returne homeward: hoping that God will giue vs a fauourable paffage, and returne vs home fafe into our natine councreys: If we take time, and not tempt him too farre, by our wilfulneffe.

Indeed moft of thefe reafons were in view; and I could not tell what to fay to oppofe them : no nor any reafon could I giue, how we might proceed further: wherefore ( with a forrow full heart, God knowes) I confented, that the helme Thould bee borne vp, and a courfe fhapte for England: well hoping, that his Maieftie would gracioully cenfure of my endeauours, and pardon my returne. And although wee haue not difcouered populous kingdomes, and taken fpeciall notice of their Magnificence, power, and policies, brought famples home of their riches and commodities : pryed into the myfteries of their trades, and traffique: nor made any great fight againft the enemies of God and our Nation : yet I wifh our willingneffe in thefe defart parts may be acceptable to our Readers. When we bore vp Helme, we were in latitade 65.30.at leaft ; North-weft and by North, from Nottingham Iland. Some were of an opinion, that we were further to the Northward: but by reafon it was by Iudgement, I chofe to fet downe the leffer diftance.
The twentie feuenth, the winde came vp at North-weft: with which winde we could not haue gone on our defigne. That winde made no areat fwelling Sea, By noone, we were athwart of Cape Charles: fo that we went in betwixt that Cape, and Mill Ilands. The laft night it did fnow very much; \& was very cold:fo thatall our rigging \& fayles were frozen, andall the land couered ouer with finow. And here,(fithence I haue formerly (polken that it fnowes very much) it will not be amiffe to confider of the reafons of it. When I was vpon Charleton Iland, (our wintering place) and in Iune, when the fnow was cleerelieft gone off the ground ; I have in the nights,
nights, ( \& fome of them following the hotteft dayes) obferued, whetherthere fell any dew or no: but I could neuer perceiue any, $\&$ (vnder correction of the learned) from moffe and fand, little (meethoughts) was to be expected. Now, of what was exhald from the fnowy Ice, and cold Sea; could there probably be returned but the like againe. Generally, we continued on our courfe, blinded with foggie and durtie weather; and that, intermixt with fnow, and froft; amongft difperft pieces of Ice: many of them higher then our Top-maft head.

Withgreat varietie of winds, we were alfo driuen within three leagues of both fhoares: fo that the laft of this moneth, we were in the narrow of the Straight : which is about fifteene leagues ouer: the South Shoare was much peftred with Ice.

## September. 1632.

x. \& 2. The firft, and fecond, we continued our endeuour to get on our way. The third in the euening, as the weather cleered vp; we did fee the Sonth end of the Iland of Refolution.
3. Thefe three dayes and nights had beene extreme cold, with fogge and froft: infomuch that our men in the euening, could hardly take in our Top-fayles and Spreet-fayle. We hane fayled thorow much mountainous Ice; farre higher then our Top-maft head. But this day we fayled by the higheft that I cuer yet faw: which was incredible, indeed, to be related. Now as the winde comes Eafterly, wee feele another Sea, out of the Ocean; and the Ship labours with another motion, then fhe hath done with any that ener we obferned, to come out of the Weftward.
8. From the third to the eighth, we had varietie of winds; and were gotten cleere out of the Straights : but were now comne into fuch a tumbling Sea, (the weather durtie and guftie, and by interims calme againe) that the Ship did folabour, and rowle, that wee thought verily fhee would hane
rowled
rowled her Mafts by the boord. This made her foleaky, that we were faine to pumpe cuery glaffe: yea, her feames did fo open aloft, that we lay all wet in her.

This was the laft day thatwee faw any Ice. The winde now fanouring vs; we made all the hafte we could homeward. By the way, (having endeauoured, obferued, andexperimented fome things in my vnfortunate voyage) I perfeated vp my faid obferuations : which being after commanded topublifh; I here moft fubmiffely offer vnto the Iudicious Readers: and raine our priuate opinion withall, concerning the faifeableneffe of the Action intended; which was to finde a paffage into the South Sca,

What hath beene long agoe fabled by fome Portingales, that fhould haue comne this way out of the South Sea: the meere thaddowes of whofe miftaken Relations haue comne to vs: I leaue to be confuted by their owne vanitie. Thefe hopes hare ftirred vp from time to time, the moreactiue fpirits of this our Kingdome, to refcarch that meerely imaginary paffage. For mine owne part, I giue no credit to them at all; and as little to the vicious, and abufiue wits of later Porting als and Spaniards: who neuer fpeake of any difficulties: as fhoald water, Ice, nor fight of land : but as if they had beene brought home in a dreame or engine. And indeed their difcourfes are found abftird: and the plots, (by which fome of them have practifed to deceive the world) meere falfities: making Sea where there is knowne to be maine land: and land, where is nothing but Sea.

Moft certaine it is, that by the onely induftry of our owne Nation, thofe Northerne parts of e America hauc becne ditconered, to the Latitude of 80 . degrees, and vpwards. And it hath beene fo curioufly done, (the labours of fenerall men being ioyned together) that the maine land hath beene both feene and fearcht; and they haue brought this fuppofed paffage to this paffe; that it muft be to the North, of fixty fixe degrees of Latitude. A cold Clyme, peftered with Ice, and other difcommodities, and where the Spaniards difuo-
fitions, and their weake Speeke Ships, can hardly long indure it. And withall, it is thus knowne, that the entrance of Hudfons Straights is but 15 . leagues broad: in the middle not fo much. And betwixt Sali,bury Iland, and the maine; that it is but 8 . leagues. Then proceeding to the Northwards, to wards the fore-mentioned Latitude: it is but 15 . leagues from mayne to mayne. This in length, is but about a hundred and forty leagues: as may more plainely appeare by the ©Mappe. Môt infinitely peftered withall it is with the Ice, vntill e Auguft, and fome yeeres not paffablethen: yea I beleeue the ftraight is neuer cleere of Ice thorowly.

Now moft probable it is, that there is no paffage : And that for thefe reafons following.

Firft, that there is a conftant Tyde flood and ebbe, fetting into Hudjons Straights : the flood frill comming from the Eaft-ward: which as it proceedes, (correfpondent to the diftance, ) it alters his time of full fea. This alfo entering into Bayes, and broken ground, it becomes diftracted, and reuerfes with halfe tydes.

Secondly, here is no fmall fifh; as Cod, \&ec. and very few great ones, which are rarely to be feene. Nor are there any bones of Whales, Sea-horfes, or other great fifh, to be found on the fhoare: nor any drift-wood.

Thirdly, that we found the Ice in the Latitude of 65.30. to be lying all ouer the fea in randes: and I am moft certaine, that the fhoalds and fhoald-Bayes are the mother of it. Had there now beene any Ocean beyond it, it would haue beene broke all to pieces: for fo we found it comming thorow the Straight into the Sea, to the Eaftward.

Fourthly, the Ice feckes his way to the Eaftward, and fo driues outat Hudfons Straight: which I haue often obferued being aland, vpon the Iland of Refolstion, and driuing among ft the Ice in the Straight.

Now admit there were a paffage, yet is it knowne, that it is partly narrow, for a hundred and forty leagues, and to be infinitely peftered with Iee withallias enery one hane found,
who haue gone that way. Comparing therefore fome obferuation taken at Bantam, Gulolo, and at Firando in Iapan: and the diftance betwixt Tapars and the W efter-part of Califurvid: with the obferuations takenat Charleton Iland, (referring all to the CMeridian of London) and then the diftance betwixt the CMeridians of Cape Charles, and the Wefterpart of Califurria, will be found to be about 500 . leagues, in the Latitude of 66.00 . where yet the Meridians incline very much together.

To this may be added, that neere about Cape Charles, the variation is 29 . degrees to the Weft: which is a probable argument, that there is muchland to the Weftward: and that this ftraight mult be very long, and that you haue no time to paffe it but in Auguff and September: when the nights are fo long, and the weather fo cold, that it will not bee indurable.

Adde to this, That neither can any great Ships, which are fit for carrying of Marchandize, indure the Ice, and other difo commodities: without extraordinary danger.

Moreouer, a thoufand leagues is fooner fayled to the Southward, and about the Cape de Bona Speranza, (where the winds are conftant) and that with fafety, then a hundred in thefe feas, where you mult dayly runne the hazzard of lofing Ship and liues. Put hereunto, that comfort for the ficke, or refrefhing for your men, here is none to be had in thefe quarters.

Towards the latter end of eAuguf $f$, and in September, the weather growes tempeftuous, and the winds incline to be Wefterly, that there will be bat fmall hope of performing your voyage this way.

But let vs (by way of imagination onely) inlarge this Straight, in this Latitude; and free it of Ice : yer what aduantage, in fpeedy performance, will be gotten by this paffage, if the winds be withall confidered? To Iapan, Chima, and the Northerne parts of eAfa, it may be the neerer cut : but in Nauigation, the fartheft way about, is well knowne,
in fewer dayes to be performed, yea withleffer paines, and more fafety of Ship and goods.

Againe; to the Eaft Indies, and other parts, where we haue the greateft Commerce and imployment of fhipping; the other way is as neere. What benefit of Trade might haue beene obtained in thofe Northerne parts of $A / i a$, I will not prefume to fpeake of: holding that there is a great difference betwixt thofe parts, and the Northerne parts of Anserica; whereas I am fure that there is none in any place where I haue beene, all this voyage.

The two and twentieth of October, we arriued in the Rode of Briffoll : hauing beene hindered and croft with much contrary tempeftuous windes and weather. The Ship being brought into Harbour, and halde dry aground to looke to her : it was there found; that all her Cut-water and Sterne were torne and beaten away, together with fourteene foote of her Keele; much of her fheathing cut away: her bowes broken and bruifed, and many timbers crackt within boord: and vnder the Star-boord bulge, a fharpe Rocke had cut thorow the fheathing, the planke, and an inch and a halfe intoatimber that it met withall. Many other defects there were befides, fo that it was miraculous how this veffell could bring vs home againe. Being all here arriued; we went allto Church, and gaue God thankes for his preferuation of vs amid!t fo many dangers. I very well know, that what I haue herehafily written, will neuer difcourage any noble fpirit, that is minded to bring this fo long tryed Action to abfolute effect. And it is likely withall, that there be fome, who hane a better vnderftanding, and a furer way of profecuting of it, then my felfe haue. To whofe defignes I wifh a happy fucceffe. And if they doe but make a reuiew of what hath beene done, and giue more certaine Coeleftiall obfervations, $H$ ydrographicall defcriptions, or exacter practice in Naruigation: it will be a moft commendable labour. For although $I$ haue fpent fome yeeres of my ripeft age, in procuring vaine intelligence from forraine Nations: and hate
trauailed vnto diuers Honourable and Learned perfonages of this kingdome, for their inftructions ; haue bought vp whateuer I could find in print, or manufcript, and what plot or paper foeuer conducing to this bufineffe, that poffibly I could procure ; and haue ferued voluntary befides; and fpent fome time in rendring a relation (fince my comming home) and expended withall of my owne monies, in my forefaid indeawours, and in furnifhing of extraordinary neceffaries, aboue two hundred pounds in ready money: yet I repent not my felfe, but take great deale of comfort and ioy, in that

I am able to giue an account (in fome reafonable way) of thofe parts of the world; which heretofore I was not fo well fatisficd in.

## Ffjcis.

## THE COPIEOF THE Letter I left at Charleton, faftened to the Croffe the firft of

Iuly, 1632.

BE it knowne to any that fhall haply arriue here, on this Iland of Charleton: That whereas our Soueraigne Lord Charles the firft, King of England, Scotland, France, and Ireland, Defender of the faith, \&cc. hauing a defire to be certified, whether there were any paffage, or not, by the North-weft or Northweftward, thorow thefe Territories, into the South Sea: Some of the better-minded Merchants, of the Worfhipfull Company of Merchant-aduenturers of the Citic of Brifoll, to fatisfie his Maieftie therein; did voluntarily offer to fet forth a conuenient Ship for that purpofe, well man'd, victualed, and furnifhed with all other neceffaries. This free offer of theirs was not only commended; but gracioufly accepted of his Maieftie. Whereupon, they fitted and furnifhed foorth a Ship, called the Henrsetta Maria, of the burthen of feuentie Tuns, victualed for eighteene moneths. A number thought conuenient to mannage fuch a bufineffe, was twentie two, whereof nineteene were choice able men, two yonkers, and my vnworthy felfe their Commander. All ulfich, the Briftow Merchants did moft iudicioufly and bountifully accommodate, and had in a readineffe, the firft of $0 M_{14}, 1 \sigma_{3} 1$.

The third of May, we began our Voyage out of the Rode of Eriffoll; commonly called Kings Rode: Paffing about the Cape Cleere of Ireland, vpon many courfes, but reduced to a Weft North-weft, we fayled along and vpon the 4. of Iune, wee made the land of Groynland to the Northward of Cape Faremell: where for the fpace of two dayes, we were dangeroufly ingagde amongtt the Ice. Being cleere of it, we doubled Cape Farewell to the Southward, and fo continued our
courfe to the Weftward; continually fayling and thrufting the Ship thorow much Ice. The 19. of Iune, we made the Iland of Refolutio: \& endeuouring to copaffe about it to the Southward, we were taken with a ftrong Wefterly wind, which droue the Ice, and it vs, vpon the fhoare. In that diftreffe, (feeing it was broken grounds and maine inlets into it, ) Ifent the Shallop to reek \& found a place, for our refuge; but when fhe was departed, the was in as great danger as we : and could not returne to vs, by reafon of the Ice. We being now driuen very neere the rocks, were faine to fet our Sayles, and force the Ship into an opening: aduenturing her amongft vaknowne dangers, to atroyd apparent; before we could moore her in a place (as we thought) fafe from danger. The $\mathbf{2 2}$. of Iune(this Inlet being full of Ice,) that Ice vpon the ebbe, fo Iambde one piece into another, that it altred the ordinary courfe of it, \& it came vpon the Ship, and put her againft the rocks : notwithftanding our vtmoft refiftance. As the water ebd away, the Ship hungby the Keele vpon a rocke; and heeld to the Offing. As foone as we perceiued this, we made faft fome Hawfers to her Mafts, and to the rocks, to hold her vpright. But all in vaine; Thee funke ftill, as the water ebb'd away: fo that fhe was fo turned ouer, that we could not fand in her. Hercupon, we got all vpon a piece of Ice,looking vpon her, \& praying God to be mercifull to vs. The rocke that The hung vpon, was a little abaft the maine Maft ; which made her hang after the head: and fhee funke ouer fo much, that the Portlaffe of the Forecaftell was in the water, At length, it pleafed God, the flood came; before it had ebd fo low as the tyde before and after, by a foote: and the Ship rofe, and was fafe and found. And thus were we miraculoufly deliuered. With the firt winde, we proceeded to the W eftward:continually being peftred with fo muchIce, that it was about the middle of Inly, before we could attaine to Sir Dudly Digges Iland. And here I was put to my confideration: for whereas by my directions, I was to fearch efpecially two places; cne from $D$ igges Iland to the Northward; and fayling there, to goe to the Chocks and Hubberts Hope, and fo to fearch it to the South-
ward; I now finding the Sea much peftred with Ice in the latitude of 64.00 and as farreas we could fee to the Northward; and that the time was fo farre fpent, as that before I could do any thing that way, it would be Aug. \& then as much trouble to returne againe to Digges Iland: and that by that time, the yeere would be fo farre fpent, the nights fo long and cold; that I feard I fhould be forced with fhame to returne into England againe that yeere. Wherefore I tooke my way to the Weftward, by CMansfields Iland; on which I landed twice, ftill hindred and incumbred with Ice. Thence I proceeded to the Weftward; hoping for an open Sea in the Bay. We were there more troubled with Ice, then in any place before: fo that it was the eleuenth day of Auguft, before we had fight of the W efternland; which we made in latitude 59.30. fomething to the Southward of the Checkes. Wee were not able to attaine thither, by reafon of the contrary winds and Ice: but were obferuant of the currant of the tydes: which after, byexperience, we found to come from the Northward. We coafted alongft the fhoare, in fight of land; and in 10. faddome water, to the Southward: and entred that Inlett, which heretofore was called Hewberts Hope: which was the very place, where the paffage fhould be, as it was thought by the vnderftandingeft and learnedeft intelligencer of this bufineffe in England. We fayld to the very bottome of it, into three faddom water : and found it to be a Bay of fome 18. or 19. leagues deepe. From thence we proceeded to the Southward, in fight of land for the moft part; and although I was as carefull to keepe the lead alwaies going (it blowing a frefh gale of winde, and a pretty bigge Sea) our depth 8.9. 10. faddome: yet before the lead was vp, the Ship ftrook vpona flat rocke: (The then being vider forefayle, foretop-fayle, maine top-fayle, and Spreetfayle) and gaue three fore knocks, and got ouer it. Being paft this danger, we proceeded, and pait by Port Nelfon. Finding the land trend to the Eaft ward, wee began our difcouery of it more catefully: becaufe that no man ( that euer I could heare
or reade of ) did cuer fee this land before. Wee ftood into fixe and fiue faddome: for it is very low land, and trends for the moft part Eaft South-eaft, and Eaft by South.

The fenen and twentieth of equguf, I entred vpon it, and in the name of the Merchants Aduenturers of Briftoll, tooke poffeffion of it, to his Maiefties vfe; naming it, The Nesp Soush-zeeft Principalitic of Wales. I brought from the land, fome fmall trees and herbs, and killed diuers forts of fowle; in figne of feyfure, which I brought aboord. Not longafter, (being put backe to the W eftward with contrary winds) we fpake with Captaine Fox, in a Ship of his Maiefties, fet forth for the fame purpofe that we were: I inutited him aboord, and entertained him with fuch fare, as we had takenin this new difcouered land : and made him relation of all our endeauours: The like did he to $v s_{\text {s }}$, and withall told $v s$, that he hadbeene in Port Nelfon: where he had put vpa Shallop, and found there many things which Sir Thomas Button had left there. The next day, he departed from vs, and food to the Weftward; and we neuer faw him fince. His Ship, He, and all his Company, were very well. We continued our difcouery to the Eaftward, and came to the Eafter point, which is in latitude 55.06. which we named it Cape Hemrietta CMaria. There the land trends to the Southward, and we followed it in fight ; but were put off with foule weather; which being ourer-blowne, we ftood in againe for the WefterThoare (that we might leaue no part vinfeene ) and followed it againe to latitude 54.40. The fecond time wee alfo put off, with like foule weather: which made vs ftand to the Eaftward. In this way we paft by fome Ilands, and happened amongft broken grounds, and rocks; in latitude 53.30 . where wee came to an Anker, and fheltred our felues fome few dayes, thifting Rodes. Now the Winter began to come on, and the nights to be long and cold; that amongft thefe dangerous places, wee were faine to fpend the day to looke for fecuritie for thenight. Here, by misfortune, our Ship came aground; and that amongft great ftones, asbigge as a mans
head ; where fhee did beate for the fpace of fiue houres, moft fearefully. In this time, we lightened her, and carried fome of our things afhoare: fo that by the great fauour of God, we got her off againe, whereupon we named this Iland, the Iland of Gods fawour. After that againe,amongit thofe Rockes, we were put to many extremities. At length, (hauing a gentle Southerly winde) we food alongft the Eafterfhoare, to the Notthward: now looking for a convenient place to winter in. And hereagaine, were we affaulted with a violent ftorme, in which we loft our Shallop, and were driuen amongft diuers dangers: and fecing an opening betwixt two Ilands, we ventered to goe in, in very foule weather. We found it to be' a very good Sound, and there we came to an Anker. We landed on one of them, which we named the Lord Wefons Iland; and man'd out our old Ship-boate vpon it. The other Hland we named my Lord of Brijfols Itand. Parting from hence, wee ftood to the South-ward, to looke for a wintering place: becaufe the time of difcouery was paft for this yeere. Many were our trourbles amongft thefe Ilands, fhoalds, and broken grcunds; which made vs ftraine our ground tackle for life, many a time.
-The 6. of Ottober, we arriued in this Bay ; it feeming a very likely place to finde a Harbour in : but fearching the likelieft places, we found it all fo fhoald flats and Rocks, and ftony by the fhoare fide; that we could by no meanes bring our Ship neere the fhoare, but were forced to ride a leaguc off, in 3 . faddome and a halfe water.

- The winter came on apace, the weather proued tempeftuous; and the cold fo muttiplied, that our failes froze in lumps ro the yards, vnmanuable. Neither could our onely boate goe from the Ship, by reafon of the weather. About the middle of Oltober, I caufeda houfe to be made athoare where our ficke men might the betterrecouer: but alwayes with an inzent to take it downe, if we found other-where, a place for our Ship. I fent likewife men afoote (feeing the boate could
not goe) to difcouer the Hland, and to fee if they could find fome Creeke or Coue; but all in vaine, we fpent the time with hope of fairen weather, till now the Cables began to freeze in the houre, and the Ship to be frozen ouer with the fprewe of the Sea: fo that we were faine to fhouell the fnow off our decks. Moreouer, the water began fo to congeale by the Thoare fide, that the boate could hardly get ahoare. Y ct for all that, if the wind blew N. W. there went a very great furfe on the fhoare, and fuch a great Sea in the Bay, that there was no bringing of our Ship aground. Befides this, fhe would haue then laine open to the E. and S. E. and S. and indeed the neereft land, all about that way, was 2 . leagues off. Hercupon, we continued out the extremity, at an Anker.
The 29. of Nouember, the Ice came about vs onall fides, and put vs from our ground tackle, and would haue driuen vs out of the Bay vpon Rockesand fhoalds (where vndoubtedly we had perifhed) but that by Gods great goodneffe, it proued fo warme a day (the winde at $S$.) that fuddenly we brought vp fome fayle, and hoyit it up with ropes, and fo forft her aftoare; where thee beat all that night very forely. The Ship being now grounded and quiet, wee confidered what was beft to doe with her, and refolued to finke her: but the next tyde, before we had any of our prouifions afhoare, the winde came N. W. fo that the Ship beat moft fearefully. We got all our dry prouifions vp to the vpper decke, and made a hole to finke her: but before fhe was funke, the beat fo extraordinarily, that we all thought the had beene foundered. Being funke downe folow, that the water came on the vpper decke, we rooke our boate and went all a hhoare, in fuch pittifull cold weather, that we were all fo white frozen, that fome ficke men that were afhoare before, did not know vs one from another.

The next day we fell to land our prouifions; firft our Bread, Fifh, and dry things, the men driuen to wade in the water vp to the middles, moft lamentable to behold. Within 2 . dayes, what with great flat pieces that fucke about vs, and that
whichfroze, it was becomne firme Ice, betwixt the Ship and the Choare: fo that then we were fame to carry all things on our backs a mile from the Ship to the houfe. Within few dayes, the hold became fo frozen, that we could not get all our things out of it, but were faine there to leaue it frozen, till the next yeere. Then we made vs 2 . other houfes: our firf houfe was our Manfion houfe, wherein we did all lye together : our other was to dreffe our victuall; and the third for a fore-houfe: which we built a pretty diftance off, for feare of fire. And now we confidered of the eftate we were in, we all doubred that the Ship was foundered: efpecially our Carpenter. But fuppofe the were-found: yet was it a queftion, whether we could get her off in the Summer, when the tydes are low. Moreouer, the mightbe fpoyled, lying in the tydes way, when the Ice brake vp: and then we fhould be deftitute of any veffell to bring vs home. The Carpenter vndertooke to build a Pinnace, of the burthen of $\mathbf{1 2}$. or 14 . tunnes, that Chould be ready by the Spring: that if we found the Ship vnferuiceable, we might teare her vp, and planke her with the Ships planke. Vpon this we refolued, and by May brought it to that paffe, that the was ready to be ioyned together, to receyue the planke. But God mercifully prouidedotherwife for vs: We indured a bitter cold winter, in which itpleafed God to vifit vs with fickneffe: fo that in the beginning of Misy 632 . there was but my felfe and the Mafter and Surgeon perfectly found: and he began to finde fome defect alfo. About the beginning of Aprill, we began to digge the Ice out of our Ship, which by the middle of May, we had effected.

The 24. of May, the Ice began to breake vp betwixt the Ship and the floare: and about the middle of lone, we had off our Ship, and found her to be ftanch and found, contrary to all our expectations. Before this time, about the mid. dle of CNay, our Carpenter dyed: and with him, the hope of our Pinnace: Mafter Wardon dyed the 6. of May: our Gunner Richand Edwards had his legge broken (which was
cut off) at the Capftang in Auguff 163 r . and languifhed till the 22, of Nonember: on which day he dyed. Thelé three men lye buried here vnder thefe Tombes of ftones. We loft another man ; one Iobn Barion our Quarter-Mafter, who mif-carried in thelittle Bay that is due We ff from this Croffe 3. mile: the Ice breaking vader him, fo that he funke downe, and we nener faw him more. The two Pietares which are wrapt in lead, and faftened vppermoft on this Croffe, are the liuely pictures of our Soueraigne Lord and Lady, Charles, the firft; and Queene Mary his wife; King and Queene of Exgland, Scotland, France and Ireland, ơ c. The next vnder that, is his Maiefties Royall Armes : the lowermoft is the Armes of the City of Brijfoll.

And now we are in a readineffe to depart this day, and I intend to profecute our difcouery to the W ef-ward, in this Latitude of 52.03 and to the South-ward alfo,although with little hope. Failing there, I meane to hafte to Diggs Iland, and indeauour to difcouer to the North-ward. Thus hauing had fome experience of the dangers of the Ice, fhoalds, and Rockes of vnknowne places: I thought it neceffary to leaue this teftimony of vs and our indeauours, if God fhould take vs into his heauenly Kingdome, and fruftrate our returne into our natiue Countrey. Wherefore I defire any noble minded Trauailer, that fhall take this downe, or come to the knowledge of it: that he will make relation of it to our Soteraigne Lord the Kings Maiefty, and to certifie his Grace, that we cannot as yet finde any hope of a paffage this way: and that I doe faithfully perfeuer in my feruice: accounting it but my duty, to fpend my life to giue his Maieftie contentment ; whom I befeech God to bleffe with all happineffe. And that they would likewife aduertife our worfhipfull Aduenterers, of all ourforcunes; and that if as afore-faid wee perifh, it was not by any want or defect in Ship or victuall, or other neceffaries; all which we haue in abundance for foure moneths and aboue: which if occafion be, wee can prolong to fixe moneths, Thus

Thus being at prefent mable to expreffe a gratefull mind otherwifebut in my prayers to God: I heartily befeech him to powre out his boumifull bleffing vpon all their honet indeauours, and to continue their noble difpofitions in Actions of this kinde. And I faithfully promife, that if I fhall come where the like Letters and Tokens fhall be left, to make a true relation of it, as it fhall be defired. So defiring the happineffe of all mankinde, in our generall Sauiour Chrift Ifefus: I end.

Charleton, Iuly the fecond. 1632.

Thomas James.

## THE NAMES OF THE feuerall Inftruments, I prouided and bought for this Toyage.

AQuddrant of old feafoned Pearetree-wood, artificially made: and with all care poffible diuided with Diagonals, euento minutes. It was of foure foote (at leaft) Semidiameter.
An Equilaterall Triangle of like wood; whofe Radius was fiue footeat lealt; and diuided out of Peticus Table of Tangents.

A Quadrant of two foote Semid. of like wood: and with like care proiected.

The Sights, Centers, and cuery other part of them lookt to, and [tryed with conuenient Compaffes: to fee if they had beene wrongd or altred. And this continually, before they were made vfe of.

Stanes for taking Altitudes and Diftances in the heauens.
A Staffe of feuen foote long; whofe Tranfome was foure foote; diuided into equall parts by way of Diagonals, that all the figures ina Radius of tenne thoufand, might be taken out, actually.
Another of fixe foote, neere as conuenient: and in that manner to be vfed.
Mafters Gunters Creffe-Stafe.
Three Iacobs Stanes, proiested after a new manner: and truly divided out of the Table of Tangents.
Two of Mafter Davis Backe-ftrues: with like care made and deuided.

## of Horizontall Inferaments.

Two Semicircles, two foote Semidiameter: of feafoned Pearetree wood: and diuided with Diagonals, to all poffible exactneffe.

Sixe Meridian Compaffes, ingenioufly made ; befides fome doozens of others, more common.

Foure Needles in fquare boxes, of fixe inches Diamseter : and other fixe, of three inches $D$ iameter. Moreouer, foure fpeciall Needles, (which my good friends Mafter e Allen and Mafter Marre gaue mee) of fixe inches diameter: and toucht curioufly, with the beft Loade-fone in England.

A Loade-fose to refrefh any of thefe, if occafion were : whofe Poles were marked, for feare of miftaking.

A Watch-clocke, of fixe inches Diameter: and another leffer Watch.

A Table cuery day Calculated; correfpondent to the Latitude: according to Mafter Gunters directions in his booke ;the better to keepe our Time and our Compaffe, to iudge of our Courfe.

A cheff full of the beft and choifert Mathematicall bookes, that could begot for money in England: as likewife Mafter Hackluite, and Mafter Purchas: and other books of Iowrnals and Hiftories.

Study Inforumenis, of all forts.
I caufed many fmall Glaffes to be made; whofe part of time, I knew to a moft infenfible thing : and fo diuided and appropriated the Logg-line, to them: making vfe of Wilbrordus, Snellius his numbers of feete anfwering to a Degree : and approoued of by Mafter Gunter.

I made a Meridian-line, of 120 . yards long: with fixe Plumb-lines hanging in it: fome of them being aboue 30. foot high, and the weights hung in a hole in the ground, to avoyde winde. And this to take the Sumnes or Moones comming to the Merididm. This line wee verified, by fetting it by the $P$ ole it felfe, and by many other wayes.

Two paire of curious Globes; made purpofely: the workeman being earneftly affected to this Voyage.

This was the manner that we tooke the variation of the Compaffe, and that as often as conueniently we could, but diuers of the Tables by negligence of my Boy are loft: but thefe ( hope) may fuffice to giue fatisfaction of our care in Nauigation.

$$
\text { Iuly } 13^{\text {th. }} \cdot 163 \mathrm{I} .
$$

Thefe 13. Azimuths with the Altitu. Dec. were taken vpon a great piece of Ice, with three Needles together : then the Declination was not equated, the laft three fet foorth by themfelues, proones the reft : viz, the Azimuth of Weft with his variatios: the Aztmuth at due Weft, And the rariation by the Altitude and $A$ zimuth at due Weft.

Thefe were taken twentie leagues to the Eaftward of Salibbury Iland; and 2. quad. one of 4 . another of 2 . foote Semid, Semicircle of 2 . foote Semid.

|  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| OI |  |  |  |  |  |
| OI | 20.14 | $35 \quad 33$ |  |  | $s$ |
| or | 2014 | 3424 | 7630 |  |  |
| 63 or | 14 | 3124 | 8018 | $N 72$ |  |
| 63 or | 2014 | 3057 | 7853 | N\| 73 |  |
| 3 O1 | 201 | 2900 | 74.50 | 77 |  |
| 3 or | 2014 | 2710 | 71 | 9842 | N 27 |
| $6_{3}$ or | 2014 | 25.52 | 68.38 | 9602 | $N$ 27 |
| 6301 | 20.14 | as 00 | 664 | 94 | 27 |
| 01 | 20.14 | 3400 | 5 | 92 |  |
| 63 or | 2014 | 23 | 6400 |  |  |
| 63 or | 2014 | 22 |  | 89 |  |
|  |  |  |  | 8918 |  |

The meane Varon is 27.36 .
The variation of the Altit : and Azim : of Wef. 27.33.
The variation of the Azimuth of Weff. 27. 48.
The variation by Azim, at due Wef. 27.35.
The meane of thefe three is 27.38 .
$Q^{2}$
Iuly

$$
\text { Iuly 22. I } 63 \mathrm{x} \text {. }
$$

Thefe three Azimuths and Alititudes were taken vpon a piece of Ice the Magneticall Azimuths by the Sunnes fhade in the water, the ayre thicke of fogge, that the Sunne gaueno perfeet fhade otherwayes: 10 . leagues Weft from CMans fields Iland.

| La. | Docl. | AL.O. | $A Z M$ | $F$ | $T . A Z$ | $F r$ | $V a r$. |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 60 | 33 | 18 | 25 | 34 | 06 | 90 | 00 | $S$ | 64 | 34 |
| 60 | $S$ | 25 | 26 |  |  |  |  |  |  |  |
| 60 | 33 | 18 | 25 | 31 | 34 | 84 | 48 | $N$ | 70 | 08 |
| 60 | 33 | 18 | 25 | 18 | 25 | 71 | 35 | $N$ | 82 | 54 |

The meane is 25.17

Inly 24. I 63 I .
Thefe Ir eAzimuths, were taken vpona piece of Iceabout the middle of the great Bay: fome of them by the fhade, and fome by the fight of the Sunne in the water, the weather being thicke of fogge.

| LA. | Dec. | $A L . O$ | $A Z$ | $M$ | $F$ | $T . A Z$ | $F$ | $V_{a r}$. |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 59 | 20 | 17 | 40 | 36 | 44 | 82 | 50 | $S$ | 59 | 04 | $S$ | 22 |
| 59 | 46 |  |  |  |  |  |  |  |  |  |  |  |
| 59 | 17 | 40 | 35 | 44 | 83 | 40 | $S$ | 61 | 18 | $S$ | 22 | 22 |
| 59 | 20 | 17 | 40 | 33 | 02 | 90 | 00 |  | 67 | 14 | $S$ | 22 |
| 59 | 20 | 17 | 40 | 29 | 49 | 84 | 25 | $N$ | 73 | 40 | $S$ | 21 |
| 59 | 55 |  |  |  |  |  |  |  |  |  |  |  |
| 59 | 20 | 17 | 40 | 27 | 25 | 79 | 50 | $N$ | 75 | 10 | $S$ | 22 |
| 59 | 20 | 17 | 40 | 26 | 27 | 78 | 10 | $N$ | 87 | 14 | $S$ | 22 |
| 14 |  |  |  |  |  |  |  |  |  |  |  |  |
| 59 | 20 | 17 | 40 | 23 | 48 | 72 | 35 | $N$ | 84 | 38 | $S$ | 22 |
| 59 | 20 | 17 | 40 | 21 | 16 | 68 | 47 | $N$ | 88 | 38 | $S$ | 22 |
| 59 | 35 |  |  |  |  |  |  |  |  |  |  |  |
| 59 | 20 | 17 | 40 | 20 | 40 | 67 | 30 | $N$ | 90 | 00 |  | 22 |
| 59 | 20 | 17 | 40 | 20 | 10 | 67 | 00 | $N$ | 89 | 00 | $N$ | 22 |
| 12 |  |  |  |  |  |  |  |  |  |  |  |  |
| 59 | 20 | 17 | 40 | 19 | 34 | 66 | 00 | $N$ | 88 | 10 | $N$ | 22 |
| 10 |  |  |  |  |  |  |  |  |  |  |  |  |

The meane is $22^{\mathrm{d}} \cdot 23.2 \mathrm{I}$.

$$
\text { Inly } 31^{\text {th }}, 1631
$$

Thefe fenerall Azimuths were taken vpon a piece of Ice: 50 . leagues off the $W$ efter-(hoare.

| AL.O. | $A Z$ | $N$ | $F$ | $T$ | $A$ | $Z$ | $F$ | $V a r$. |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 24 | 00 | 76 | 26 | $N$ | 99 | 20 | $N$ | 22 | 54 | Latitude |  |
| 23 | 35 | 76 | 00 | $N$ | 98 | 38 | $N$ | 22 | 38 | 5843 | 43 |
| 22 | 50 | 75 | 00 | $N$ | 97 | 18 | $N$ | 22 | 18 |  |  |
| 22 | 05 | 73 | 40 | $N$ | 96 | 04 | $N$ | 22 | 24 | Declina |  |
| 20 | 32 | 71 | 20 | $N$ | 93 | 32 | $N$ | 22 | 12 | 154343 |  |
| 18 | 40 | 67 | 55 | $N$ | 90 | 24 | $N$ | 22 | 29 |  |  |
| 18 | 30 | 67 | 30 | $N$ | 90 | 02 | $N$ | 22 | 32 |  |  |

The meane is 22, 29. 34.

## Avgnfin. 163 I.

Thefe feuerall e Azimmths were taken vpon a piece of Ice : about 40 . leagues off the Wefter-fhoare.

| AL.O. | $A Z . M$ | $F$ | $T . A Z$ | $F$ | Var. |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 26 | 36 | 83 | 05 | $N$ | $104 \cdot 36$ | $N$ | 21 | $3^{1}$ | Eatitude |  |
| 25 | 24 | 81 | 25 | $N$ | 103.06 | $N$ | 21 | $4^{3}$ | 58.45. |  |
| 24 | 26 | 78 | 38 | $N$ | 100,42 | $N$ | 22 | 04 |  |  |
| 22 | 30 | 75 | 16 | $N$ | 97 | 22 | $N$ | 22 | 06 |  |
| 21 | 31 | 73 | 50 | $N$ | 95 | 42 | $N$ | 21 | 52 | Declina. |
| 20 | 10 | 71 | 27 | $N$ | 93 | 24 | $N$ | 21 | 57 | 15.250 |
| 18 | 42 | 68 | 40 | $N$ | 90 | 58 | $N$ | 22 | 18 |  |
| 18 | 07 | 67 | 25 | $N$ | 89 | 56 | $N$ | 22 | 31 |  |

Themeane is 22.00 .
eluguft. $5^{\text {th. }} 1631$. Thefe e 1 zimut hs were taken vpon a piece of Icc, and calculated by all the figures of the Canon about 40 . leagues off the Wefter-Thoare.

| $\begin{aligned} & \text { Latitude } \\ & 58.37 . \end{aligned}$ | AL. 23.14 | AZ. $M 1$ 79.12 | F N | T. $A Z$. 101.02 | $\stackrel{F}{F}$ | var. $2150$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 22 II | 76.40 | $N$ | $99 \quad 12$ | $N$ | 2232 |
|  | 2111 | 75 11 | $N$ | 9728 | $N$ | 2217 |
|  | 2000 | 7302 | $N$ | 9548 | $N$ | 2246 |
| Declina. 14. 12. | 1859 | 71 | $N$ | $93 \quad 47$ | N | 2223 |
|  | 1715 | $68 \quad 35$ | $N$ | $90 \quad 53$ | $N$ | 22.18 |
|  | 1642 | 6728 | $N$ | $90 \quad 00$ |  | 22.32 |
|  | 15 39 | $65 \quad 32$ | $N$ | $88 \quad 18$ | $N$ | 22.46 |

The meane is 22.25 .30 .

Thefe obferuations were taken the $10^{\text {th }}$. of $N$ ovember: 8631 , the Lat. 52.03. the difference may be conceiued, to grow by reafon of the Sunnes low Altitude and Refraction. The others about the Summer Solftice, where difference of Meridians is auoided, and are more exact.

| Alt. $0^{\text {G }}$ | AZ. CM. | T. A $\mathcal{Z}$ | Var.Weft. |
| :---: | :---: | :---: | :---: |
| G. CM. | f. М. | G. M. | G. M. |
| 1425 | 4225 | 26 If | 1614 |
| 1400 | $45 \quad 25$ | 2730 | 1755 |
| 1315 | 4725 | 2954 | 1731 |
| 1218 | 4810 | 3233 | $15 \quad 37$ |
| 1203 | 4920 | 3316 | 1604 |
| 11.41 | 5107 | 3415 | 1652 |
| 1057 | 5325 | 3604 | 1721 |
| 942 | 5525 | 3858 | 1627 |
| 915 | 5745 | 4000 | $17 \quad 14$ |
| 850 | 5837 | 4052 | 1745 |

The meane is 16.57 . Weft.

## An Appendix touching

 Longitude.LAtitude and Longitude are two primary affections of the Earth, by the helpe of thefe two, doth the Geographer ftriue to reprefent the parts of the Earth that they may keepe Symmetry and Harmony with the whole. Latitude then is an arch of the Meridian, comprehended berweene the Equator and a Paralell; but Longitude is an arch of the Equa= tor, intercepted by the Prime Meridian and the Meridian of a Place, the difference of Longitudes being the difference of two Meridians. The meafure of the former is the Meridian, the $\not$ Æquator of this latter. For the exact fettling of Latitudes we haue many and abfolute helpes, fo that the Error if any happen,ought to be imputed to the imperfect handling of the Artif. But the Longitude of a Meridian is that which hath, and ftill wearieth, the greateft Mafters of Geography. Neuertheleffe hath not the wife Creator left Man vnfurnifhed of many excellent helpes to attaine his defire: For befides Eclipfes, efpecially of the Moone, (whofe leafure we muft often waite, and perhaps goe without, if the Heauens be not propitious to vs) we haue the Concurfe of quicke pac'd inferiour Planets, with fuperiour flow ones, or their Appulfes with fome fixed Starre of knowne place, or elfe fome other Artifice deriued from their Motions and Pofitions. As for the Magneticall Needle to arguea Longitude from its Variaticn, is altogether without ground. And though well furnifht Seamen are able by their dead Reckonings (as they tearme them) to determine the difference of Meridians fomewha: neere, yet by reafon of the vnknowne quantity of a Degree in a giuen meafure (which is the Rtile of the Ships way ) Varieties of aduerfe winds, Different fets of Tydes, and other inuolued incombrances, they come often wideof the mark they aime at. The beft way yet knowne to the world, is that which is dedaced from the Coeleftiall Apparences, which being performed by Iudicious Axtifts, may in fhort time rectifie our R

Geographicall

Geographicall and Hydrographicall Charts hitherto in moft places fouly diftorted. It is my intent here, to giue an inftance from two feuerall obferuations drawne from the Coleftiall Bodyes, by the Author of this difcourfe, in his difcouery for the N. W. at the bottome of the Bay, being his wintering place, and called by the name of Charr loton, which for Iudgement, Circumfpection and Exactnes may compare with moft: The firft from the Eclips of the Moone ; The fecond from the Moones Mediation of Heauen, or Her comming to the Plane of his Meridian of Charleton.

The Captaine then mindfull of the Lunar Eclips which was to happen Ottober 29. Anno 1631. was wayting on the Moone with his Inftruments, but by reafon of the Interpofition of the clouds, could make no Obferuation on the beginning of her Obfcuration, but at her Emerfion or Totall Recouery of Light, the heauens being more Serene, he tooke the Altitude of the Superior Limb of the Moone 29.gr. I I , m. The Latitude of Charlton being 5 2. gr. 3. min.

At that very time, my felfe with fome friends found the exact time of the Moones Emerfion at London in Grefham Colledge (by a Quadrant of fixe foot Radius, actually cut to each minute of the Quadrant) to be Octob, 29. 13.h.7. m. 28 fec. or Oerob.30. d.at one of the clocke, feuen minutes, and abour a haife in the morning.

Now becaufe the Tables of the Coeleftiall Motions, lately publifhed by that moft Learned and Induftrious Lansberg, doe much amufe, the world with that loftie title of Perpetaity, it fhall not be amiffe to enquire after the time of the Captaines Obferuation from them, that fo by comparing the one with the other we may obtaine the difference of Meridians, which is the matter now fought after.
The middle motions of the Luminaries anfwerable to the C quall time of the Emerfion of the Moone, are thefe which: follow.

## An Appendix tosching Loxgitude.

> Sex. Gr. M. S.

> 2 Sunne $\quad 3 \cdot 47$.39.26 The middle motion of the Center of the o 3 is 4958 Apogxú of the $\begin{aligned} & 354544\end{aligned}$ The middle motion of the $\begin{aligned} & \text { Lögitude of the ) } \begin{array}{llll}2 & 5919 & 1 \\ \text { Anomaly of the) } \\ 0 & 5 & 11 & 130 \\ \text { Latitude of the) } & 4 & 328 & 15\end{array} \\ & 4\end{aligned}$ The Profthaphzerefis of the Æquinox -0. 1230
Being thus furnifhed with thefe middle motions wee are next to enquire for the true places of the Luminaries \& their Concomitants, as their right Afcentions, the Declination, $\mathrm{La}-$ titude,Semidiameter, Parallax, \&\& Refraction of the C, that fo the true Altitude of the (. center, and confequently the time of the Emerfion may be had at Charleton.

For the Sunnes true place.
The middle motion of the $\odot$ Center, 3.15 .49 .58. The Profthapherefis of the Center add. - 0, I 37.0 The Proportionall Scruples. - 1 .
The middle motion of the $\bigcirc$ Apogzum. - 1. 35.45 .44
The true motion of the Apogxum fubtr. - 2. 37.22 .44
The middle motion of the $\odot$ is —————3. $\mathbf{3} \cdot 39.26$
The Anomaly of the $O$ orbe -2, 10. 16.42
The Profthapharefis of the 0 orbe ——O. 1. 32.43
The exceffe to beadded -0. 0. 0. 20
The abfolute Profthaph of the © orbe fubtr. O. 1. 33. 3 The midd.mot of the © fro the true ※ qui., 3. 47. s1. 56 The true mot. of the $\odot$ from the true Æqui. 3. 46.18.53 Therefore the $\odot$ true place was in ty ——o. 16. i8. 53 And his right Afcention

For the Moones true place.
The Anomaly of the (Center ——— 5. 59. 18. is The Profthapharefis of the (Center --0.0. 5. 36 The proportionall Scruples - 0 . The Anomaly of the ( orbe The Equated Anomaly of the (orbe - -0.5 .5 .54 R 2

## An Apperdix tonching Langitude.

Sex. G. M.S.The Prothapharefis of the D orbe fubtr.-0. 0.24 .4 .The nnid.mot.of the $)$ Longitude from the $\odot .2 .59 \cdot 39$. IThe truemotion of the $>$ Longit.from the $\odot \cdot 2 \cdot 59.14 .57$The mid. mot. of the () from the true æquin. 3. 47. . 51. . 56The true mot, of the $>$ from the $t$ rue aquin. 0.47 .6 .53Therefore the) true place was in $\succ-0.17 \cdot 6.53$For the) Latitude.The middle motion of the $)$ latitude. $4 \cdot 32.8 .15$.The ) abfolute Profthaph. of her Orb fibtro o. .o. 24. 4.The ) true motion of Latitude.
4.31.44.11. The ) Northerne Latitude was.
-. 0. 95. And her Reductiue Scruples Subtr.
o. o. 0. 26 But the ) true motion in her proper Orbe was 0. 17.6:53: Therfore the ) true placereducedto the Eclipt 区.17.6. 27 . And becaufe the North Lat. of the ) was 0: 9: 5 : Therefore will her Right afcens. be. 44:35:10 And her Declination And becaufe we haue the diffance of the Moone. From the carth in Semidiameters of the earth. 64 is Therefore fhall the Japparent Semidiam: be - 0. 15. And her parallax of Altitude. Now becaufe the Altitude of the limbe of the ) was found by obferuation to bee -If we fhall fubftract her Semidiameter0: 15:

And the refraction ..... 
We haue the apparent Altitude of the ) center- ..... 28:54:

To this if we adde the parallax of Altitude ..... 47:

We fhall have the true Altitude of the ) Center: 29:41:
Hauing thus the Latitude of the place, the ) true Altitude with her declination, by the e efolution of a Spharicall Triangle according to the 11 Probleme, lib. 2. Part. 2. of our Britifh Trigonometry we have the diftance of the $\rightarrow$ from the Meridian _ - 63:26: - And by comparing this Arch with the difference of the afcentions of the Luminaries, the Time of the ) totall recouery of her light at Charltos will be 7 . hou. 49 -min. 28 fec.

## An Appendix touching Longitude.

Which fubtr. from the time of the Emerfion at London, 13 hou. 7 . min. 28. fec.
The difference of Meridians in refpect of time will be 5 : $h$. 18: m. ©. So that Charlton is remooued from London W eftwards, $79 . \mathrm{gr} .30 . \mathrm{m}$.

This may likewife be confirmed by a fecond different obferuation made at theinftant of the Moones Culmination or Mediation of Heauen, at which time the Altitude of the brighteft Starre in the Afterifme of the Northerne Crowne, (being of the fecond Magnitude) was found to be $33 . \mathrm{gr}$. 27. m. Eafterly. Ann, 1632. Tune 23.

It may be Problematically deliuered after this manner.
Hauing the Latitude of a Place, with the Altitude of a knowne fixed Starre at the moment of the ) culmination, to finde the Longitude.
This fixed Starre is of knownelongitude and latitude, therfore was his Declination 27: 59: and rightafcenfion 229.46. Now by the refolution of a Spharicall Triangle of 3. knowne fides we haue the diftance of this Star from the Meridian, and by confequence the right afcenfion of the ), whence we conclude her Culmination to be with the $28: 10: \mathrm{m}$, of \% $\%$. but the Moones true place was much leffe. Here note that the fcmpulofity of time is vnkno wne, and therefore we cannot argue the ) true place from thence (though I grant it mightbecuinced) for that were to begge the Queftion, and to know that firtt, which we lookeafter.

In the next place we are to inquire with what point of the Ecliptique the did culminate with vs here at Loxdon, that fo from the difference of her places, of the like affection, we may deduce the difference of Meridians.
Obferuation on the) Culmination here at London li ee madenone, therefore mult we have recourfe to the aforefaid Tables of Lan/berg, and from thence calculate the fame. Now becaufe the) was not farre remooued from the $\odot$ oppofite point. It will not be amiffe to enquire firt the $)$ placeat midnight. Sex. Gr. M, S.
The $\odot$ oppofite place a- midnighe in vo
o 11. 18.15. The $D$ true place at midnight reduced to the Ecliptique was in $\gamma_{0}-\frac{\mathrm{R}_{3}}{}=0,23,33.18$ The

The South Latitude of the Moone was --0. 4. s6. 3 : Therefore the difference of Afcenfions will be-14.6.0 The Diumall motion of the Moone ————14.240 Therefore the Moone proper motion anfwerable to the difference of Afcenfions is 0. 33.50 Which added to the Moones true place at midnight 23.33.18 Giues vs the Moones true place reduced to the Ecliptique at her Culmination at London -24.7.8

Now becaufe the © Southern Latitude was 4.56 .38 , the Arch therefore of the Ecliptique comprehended betweene the Moones true place and the culminating point of the Ecliptique will Trigonometically be found to be $54: 38$. which addedto the © true place before found giues vs the culminating point of the Eclipti. 25 .gr. 1.m. 46 .f. which is leffe then that found at Charleton:the difference being 3.8.24. therfore is the place of Obferuation Wefterly of London. Hauing therfore the ©Diurnall motion \& the difference of the feucral culminating points we conclude the Meridian of Charlton to be diftant fró this of Lödon 5. h. $14 . \mathrm{m}$. of time or 78.30 . of the Equator.

The difference betweene that of the Eclipfe, and this latter obferuation is only 4 . minutes of time or one degrec a difference cafily pardoned, efpecially if wee fhall compare the fame with fome other places, yea euen fuch as border neerely on each other. To give an inftance on 2 eminent places which lye in the heart of Europe, Rome \& Norenberg: Their difference of Longitude Regiomontanus makes 36. Werner 32. Appian 34. Mxftlin and Origan 33. Stoffer 18. Maginus 26. Schoner 12. Mercator and Hondius as much. Stadius 13. Tanfonius 10 . Kepler by 2 obferuations on 2 Lunar Eclipfes, but 4 minates of time.

This varietic among thefe great Artifts, will I hope pardon vs this difference of $4 . \mathrm{m}$. and be a means to incourage our Englifh Sea-men and others, to make fuch or the like obferuations in forraine parts as the heauens fhall beoffred vnto them.
H. Gellibrand.


## To the venerable eArtifts and youn-

 ger Students in Diwinity, in the famous Vniuerfity of CAMBRIDGE. $\mathrm{O} V$ nobly-witted, and inge-nuoufly-ftudied Acadenians : whofe excellency in all kinds of learning, all forraigne $V$ miwer $\hat{2}$ ties doe admire, and none atteine vnto. I here prefent you a Voyage to Cholcos, though not the Gplden-fleece with it : the Searche, I meane, but not the finding; of that fo much talkt of, fo often fought for, North-Weft Paffage, and neerer way into the South-Sea. That, wherein fo much Time and Treafure haue beene expended, fo many braue Spitits employed, and yet none difcouered. Perchance, there is no fuch Paffage to be found : and that the Spaniards, by the gullery of their falfe Sea-Cards, and the fable of an old Greeke Pilote; haue but diuerted our Englifh and Dutch Sea-men, from their golden Indyes. This plot of theirs hath taken, for thefe many yeeres: and it appeares to bee but a plot, for that themfelues neuct make vfe of this Paffage. For mine owne part, I fuppofe that the Philofophers ftone is in the North-Weft Paffage. My argument for it is, For that theres fo much Philofophy in the way to it.

So much, and fuch variety: fuch variety, and that fo various, (I thinke) from what is receiued in the Schooles: that it were well worth the difquifition of an Vnuer $\overline{i t y}$, (and I wifh you the firt honour of it) either to find out, how thefe obferuations may bee reduced to Ariftotles Pbilof opby: or whe her they nced any other enquiry, and ought to be examined by fome other Rules, then Arifotle hathyet light vpon. This is my purpofe of infcribing it vato you. Of this one thing am I confident : that you are all fo rationall, and ingenuous, as to preferre Truth, before Authority: Amicus Plato, amicus Arifoteles, but magis amicaveritas. Your Sciences, then, being Liberall; your Studies, I know, haue fo farre paffed into your maners, that your minds are fo too, and that fuch as haue already profited beyond the credulity required ina yong learner, and are themfelues promored to be Mafters of the Arts; though they ftill reuerence their old Greeke Tutor, yet they will not fuffer that of Pythagoras Schoole, fo to domincere in Ariftothes, as to let an Ip fedixit, goe away with it: much leffe allow it the authority of a Mayors hammer, with one knocke to filence all arguments.

Vpon this confidence, $I$, with all due refpects, here preferre two Propgitions vnto your difcuffing. The firf this, Whether thofe Rules of Ariflotles Philo fophy be to be allowed fo V niver fall, that they bold all the world ouer. The fecond this, whether they ought to be fo magifteriall, as to prefcribe against all other examinations. The firft of thefe, I thall but problematically propound vnto you: but in the fecond, I hope a man of my cloathing, may bee allowed the free-s.- ne home fomething more earneft.

But that I may not come with preiudice to the making of thefe motions, or bee thought, vpon fome ignorance or ambition, to fpeake againft the incomparable ctristotle; I fhall defire all my fellow academians to allow me fo much difcretion, as to know, That he that fhall in your hearings, oppofe your $\mathcal{A}$ riftotle; does like the Ship here fpoken of, runne againft a Rocke, endanger his owne bulge, and the ftauing of his veffell. No, I fo farre honour the old Aristotle, that I well allow him to bee Master and Moderator of the Schooles: and that there is the fame refpect due to him in the Schooles, which, by Reafors and long Custome, is due to one of the Kings Ships in the Narron Seas; That in acknowledgement of a Sousraignty, every other name ought to strike fayle to him. Aristotle (it muft be confett) hath made all learning beholding to him: noman hath learned to confute him, but by him; and vnleffe hee hath plowed with his heyfer. He had the mof incomparable wit, and was the moft Logicall and demonftratiue deliuerer of himfelfe, of all the Sonnes of nature: One, who beft of all deferued to be cald Her Principall Secreta$\% y$ : one, who not onely adornes a Library, but makes it: 2ui habet Aristotelem, habet Bibliothecam, is truer of him, then of the Great Comparer. This is my opinion of him; and I wilh him more ftudyed.

Tis not, therefore, the name, or the authority of the great Aristotle, that my Propofitions meddle withall: but whether his obferuations gathered out of this part of the world alone, could, like a royall Paffe or a Commif sion, carry a man all the world ouer?

It muft be conféft, That in refpect of the Equinoctiall and the Latitude that Aristotle liued in, hee was but a Northern mann: and twas his owne Rule, that Nibil agit extra Spharam activitatis fue. So then, it would bee put to voyces to confider, whether he that knew but thefe Northerne parts, and the Mediterranean Sea; could poffibly make fuch collections, by whatwas here to be learned, as fhould bee vnfaileable in the Southern Hemijphere and the two Indyes? Plainely, thofe that are conuerfant in the navizations and bookes of voyages into thofe parts; have found fo many contraricties to obferue; that it were rather tedious, then difficult, to fill vp a Notebooke with them.

The Ancients, weeknow (as if they had meafured the world by the Yeard-wand) reftrained the limits of temperature, and habitation, by the fiue Zones: without confideration of any interloping or concur-ring caufes, which experience hath now found out, to have quite altered their obferuation. I adde, that a good leifure and diligence might obferue, how in the contrary part of the world, therebe found cleane contrary Caufes and Effects, vnto thofe in this part of the world. The South-wind there, brings cold and Winter: and the North, is the rainy wind. How will the Thunder and the Wind, be made agree with Arisfotles definition of a Meteore? In fome places of the Mountaines Axdes by Peru, it thunders cuer. The East-Indyes haue their croonfons and their fteady winds, conftant for fixe moneths together : and who Chall affigne their caufes : Then the doctrine of the Tydes, nothing fo vncertaine: which ebbe and flow in fome places, different; and in others contrary,
to the Moose and her motions. This (as Iremember) is Ariftotles definition of a Meteore, That it is, $19 n$ imperfect mixi body, generated out of an infirme and ins- sucteor- I. constant concretion of the Elements; which therefore cannot be durable. Now the Monjon, is both conftant in his continuance this yeere, and in his returne next yeere; moft conftantly keeping his feafons halfe yeere one way, and halfe yeere another way, for all ages: nothing more conftantly or durably; and therefore nothing like Aristotles Meteore. And fo for the Thunder vpon the Andes : it is firft perpetuall; fecondly, not caufed by a dry exhalation, (as Aristotle wills) but hanging ouer fuch hils as are couered with fnow and a perpetuall winter. Witneffe the Thunder on the Alpes alfo: yea and that in the middle of the Sea, 500 . leagues from thoare, or any thing that is dry. Yea, it frequently both Snowes and Thunders vpon the Andes, at one inftant: and in dry places that are hard by, farce euer Thurdering.

But not to paffe the Line for it; You fee in this little Booke, how Charlton Iland, which is no more Northerly then your Cambridge; is yet fo vnfufferably cold, that it is not habitable: and that there encounter fo many different, (at leaft fo feeming) occurrences of nature, as were well worth the difquifition of a Pbilofopher. I could, (in my fmal reading) inftance in many many other particulars: which I had rather fhould be found out by fome induftrious fearchers after Nature, in the Moderne Relations of our Difcoverers, then in this my thort Propofition. Tis not to be doubted, but that the carefull reading of our Books of Voyages, would more elucidate the History of Nature, and more conduce to the impronement of Philofophy, then any thing that hath beene lately thought upon. Thefe Navigations haue in part fulfilled that of the Prophet, cMany fiatl paffe to and fro, and knowledge fhall be encreafed. This, I uuppofe, might be obferued from this ftudy, That the great and infinite Creator hath fo difpofed and varied euery thing, that it is impoffible for mans reafon and obferuation to conclude him: and therefore, though vulgar and receiued Philofophie, may give a man a generall hint, all the world ouer;yet no Vniwerfall and vnfayling certainty.

This brings mee to my Second Propofition, That feeing God will not haue his works, (no more then his Kingdome) to come by obferuation; Whether, then, ought any humane dictates to be fo Magifteriall, as to preforibe againft all other examination?

No humane ftudy more collduces to the fetring forth of Gods glory, then the contemplation of his great workes, in Pbilo opobic: for though a fmattering knowledge in Second Caufes, warps the mind towards Atheifme; yet a higher fpeculation of them, brings about againe to Religion. No man, I belecue, will thinke it fit for vs to haue a Pope in Philofopbie; one, that no body fhall prefume to cenfure of: but all be bound to aduance his Decretalls, aboue the Holy scriptures. This is the fcandall that my felfe, and diuers good men take, at the vndue authority in fome heatés pinn'd vpon the Stagerite.
Suidas, 6 Rabbria.

I am forry that the If raelites dotage vpon Salomons Philofopbie, thould have caufed the zealous Hezekiab. to call in and to fuppreffe thofe vaualuable phyficks : for feare, I fuppofe, left their credir fhould have as nuch derogated frö the authority of the Holy Scrip
tures; as the brazen Serpent (which he deftroyed about the fame time) had done from Religion. None will beleeue, that Salomons Pbilofopbie was contrary to the Scriptures; feeing the Scripture commends Salomon for them. Twas not Hezekiahs feare, therefore, (or not onely) left there might haue beene a competition betweene them, but a neglect of one of them: he was icalous left the Scripture might haue any writing fet vpby it, though not againft it.

Can Diuines, then, be blamed for fpeaking, when they heare Aristotles Philofophy to be folely magnified, and the ftudy of the Scripture Philofophy, diffefpected : Or that when tis confeft, That fuch a thing is true in Diwinity, and yet the Moderating of the point determine for Philofophie? Nay, to heare it cald abfurd and ridiculous, to haue Scripture vig'd at all, in point of Philofophy? No doubt there is, But whatfoeuer is falfe in Diuinity, is alfo falfe in Nature, how much thow of truth foeuer it paffes with, in Philofophy. Philofophy hath taken its turne in the Schooles:and the holy Texts by the Schoolemen, haue cuen been fubmitted vnto Axifotles: yea, to the great corruption of Theologie, as the complaint is, hath this man been fo farre aduanced, That Contra est Pbilofophus, \& Contra est Apositolus; haue familiarly paffed vp and down, for equall oppofitions: fo that it hath been a meafuring cast oftentimes, betwixt the Prophet and the Peripatetick: and by foule play hath the meafure beene made to ftand the harder at the Peripatetick, for that the Prophet hath beene enforced to comply with himby a wreited interpretation. Thus had S.Paul need give his caveat vnto Theologie, as well as vito Theologues, Bemare lest any man jpoyle yon through P hilofophy.

All this were to no purpofe, vilenfe the Text of God were excellent in this kinde ; andembellifted, here and there, with moft admirable Pbilofophy. What incomparably rare foot-fteps of it, haue we in the Bookes of Genefis, Tob, and the Pfalmes? How noble a Study then were it, and how worthy the leifure of fome excellently learned; to beftow fome time vpon it? Valefius the Phyfician, hath in his Sacra Philofophia done fomething in this kinde: who yet might haue done better, here and there, for the honour of the Scriptures. I am not fo fottih to belecue, That euery particular is to be drawn out of Scripture: tis none of my doteage, that. Or that God in Scripture did intend, euery where, the accurateneffe of Philofophy; or ftand to be fo curious in definitions and decifions. Nor fo foolifh would I be thought, as to haue all Pbilof ophy taken in pieces, and new moulded by the Scriptures. Nor, that nothing fhould bedetermined on, till a Text confirmed it. Butthis, perchance, might profitably be thought vpon: That. where the scriptures haue any thing in this kinde, it thould more reuerently be efteemed; Collections out of fcattered places, (as is done our of Arifotley) made: thefe compared, and their Refiutrances obferued. This, furely, would amount to more, then is yet thought of: and,a-Gods name, let Schollers be fo bold with $\subset$ Arifotle, as to examine him vpoin good affurance', by what is Truths Touch-foone: Received Philofophy is a moft neceflary hand-maid to the Scriptures; but let her no be fet aboue her Lady, nor no competition be maintained betwixt them.
Something elfe remaines to be thought of: That feeing the fame God, who gaue 1 Ariffotle thefe good
parts; hath, in like manner, raifed vp many excellent Spirits moe: whether it were not iniurious vnto what is done, and a difcoursgement to what might be done; to haue the inventions or obleruations of thofe excellent wits and great induftries, foabafht with Arifotles authoritie; that they can haue no credit in the world, forthat his Dictates have pre-occupated all good opinion? Let it not then be thought vnequall, to examine the firft cogitations of the old Pbilofophy, by the fecond thoughts of our more moderne Artifts: for that the fancimprouement may by this meanes accrew vnto our Phyficks, that hath aduanced our Geography, our Mathematicks, and our Mechanicks. And let it not be thought fo infoleat, to refufe Ariftotles authoritie fingly, where his reafon is not fo concluding; feeing other men haue taken the boldneffe to doe that before vs, in feuerall kinds. Some haue perfected, and others controld his Ethicks, by the Scriptures: as Scultetus, Wallous and fome others. Iuftin Martyr fir-named the Philofopher, hath purpofely written Contra dogmata Arifotelis: Bafon and Gaffendus, (two braue men) haue newly written pointblanck againft him: nor haue they taken away all liberty, from thofe that are to follow them.

And thus, with renewing my former proteftation for mine owne refpects to Aristotle, I conclude my two Propofitions: which I defire may receiue a fauourable confruction from all ingenuous, imcapricious Schollers. I meant them, out of good will to promote learning; to encourage and countenance future vndertakings: and in fuch a cafe, a little too much faying, may be thought not to haue exceeded an honeit Rhetorication: for I would not be thought too carneft
earneft in it. The hint for all this, I tooke from this booke: which in mine owne and fome better Iudgements; is (to fayno more) as well done, and enriched with as fure and vfefull obferuations, as any in this kinde. I was defired by the able Author, and fome orher friends; to ouer-looke the written Copy of it, and to amend the Englifh here and there; in which I did not defpaire of doing fomething : for that, in my yonger time, I had a little acquainted my felfewith the language of the Sea. That which put me in the head to infcribe it vnto your Names (moft excellently learned 1 cademians) was, for that the place of this Wintering, was within a minute or two, of the beighth of our Cambridge. Which my prayer to God is, that your Studies may make famous.

## Yours X. Z.




