

XXX. *Accounts of a Capricorn Beetle, found alive in a Cavity within a sound Piece of Wood, and of the Horn of a Fish struck several Inches into the Side of a Ship; by C. Mortimer, M. D. Secr. R. S.*

ABOUT Michaelmas 1728. I went to *Portsmouth* with some Friends, where having taken a View of his MAJESTY'S Yard and Docks for building Ships of War; and satisfied my Curiosity in examining several curious Contrivances used in Naval Architecture; Mr. *Bankley*, the Clerk of the Survey, invited me to his House, where he shewed me the Insect as represented in TAB. VIII. *Fig. 6.* and 7. The People of the Yard were much alarmed at it, none knowing what to make of it; and all imagining it was venomous. On opening the Piece of Wood, (which was tied together with a Packthread) I found this Animal yet alive, and moving in a large Cavity in the Middle of the Wood, which appeared otherwise sound, having no visible Entrance into it. This Beetle, being turned out upon a Sheet of Paper, crawled about upon it. Mr. *Bankley* gave me the following Account of it: " This Insect was found *August 26.* 1728. " in splitting a Piece of Exotic Wood into Two " Pieces, cut across the Grain  $4\frac{1}{2}$  Inches thick, taken " up in the Hold of his MAJESTY'S Ship *Bredah*, " when in the Dock at *Portsmouth*, after her Return " from the *West-Indies*: It lived upwards of a Month " afterwards. The Hole in which it was nourished,

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" was

“ was 5 Inches deep, and 2  $\frac{1}{4}$  Inches by 1  $\frac{1}{4}$  Inch  
 “ broad, in the great Piece ; 2 Inches deep, and 2  $\frac{1}{4}$   
 “ Inches by 1  $\frac{1}{4}$  Inch broad, in the smaller Piece.  
 “ There was not the least Sign of any Defect on the  
 “ Outside of the Wood, but it appeared very fair and  
 “ sound; the Inside was porous, having a Grain like  
 “ *Cedar*, but in Colour not unlike yellow *Sanders*.”

On Examination, I found this Insect to be a sort of  
*Scarabæus* called *Capricornus* from its long Horns;  
 which in this were very much crumpled, and partly  
 broken off against the Wood, in its Confinement:  
 Its Wings were likewise crumpled on the same Ac-  
 count. The Females of these Insects usually lay their  
 Eggs in the Crevices of the Bark of Trees: So it is  
 probable, that as soon as this Insect was hatched in  
 Form of a Worm, it gnawed its Way through the  
 Bark into the Wood; and that afterwards the Hole  
 it had made in the Wood, closed towards the Out-  
 side; and the Worm, still continuing to gnaw deeper,  
 formed the large Cavity; and then taking its perfect  
 Form of a Beetle, remained in that hollow Place,  
 where the Sap of the Tree arising, might have sup-  
 plied it with Nourishment, and even Air; since it is  
 known, by various Experiments, that Air will insi-  
 nuate itself, where-ever such Fluids, as contain Air in  
 them, can penetrate.

I have seen in the magnificent *Museum* of Sir  
*Hans Sloane*, Bart. a Piece of Wood, found without,  
 having a Cavity within, wherein was found alive a  
 sort of Beetle, but I think of a different *Species*. It  
 came from *Jamaica*, if I remember right.

At the same time, that curious Gentleman Mr.  
*Bankley* shewed me the *Horn* of a *Fish* that had pene-  
 trated above 8 Inches into the Timber of a Ship [see

TAB. VIII. *Fig. 8.*]; and gave me the following Relation of it: “ His MAJESTY’s Ship *Leopard*, having  
 “ been at the *West-Indies*, and on the Coast of  
 “ *Guiney*, was ordered by Warrant from the Ho-  
 “ nourable *Navy-Board*, dated *Aug. 18. 1725.* to be  
 “ cleaned and refitted at *Portsmouth* for Channel-  
 “ Service: Pursuant thereto, she was put into the  
 “ great Stone-dock; and, in stripping off her Sheath-  
 “ ing, the Shipwrights found something that was  
 “ uncommon in her Bottom, about 8 Feet from her  
 “ Keel, just before the Fore-mast; which they search-  
 “ ing into, found the Bone or Part of the Horn of  
 “ a Fish of the Figure here described; the Outside  
 “ rough, not unlike *Seal-skin*; and the End, where  
 “ it was broken off, shewed itself like coarse Ivory.  
 “ The Fish is supposed to have followed the Ship,  
 “ when under Sail, because the sharp End of the  
 “ Horn pointed toward the Bow: It penetrated with  
 “ that Swiftnes or Strength, that it went through  
 “ the Sheathing 1 Inch thick, the Plank 3 Inches  
 “ thick, and into the Timber  $4\frac{1}{2}$  Inches.”

With what prodigious Force must this Fish have moved? For had it met the Ship, the Motion of the Ship would have assisted the Penetration of the Horn; but the Direction of it pointing from the Stern towards the Head, shews that the Fish struck against the Ship, either while at Anchor; or that it overtook it, while under Sail; in which case the Force of the Fish must have been still greater; and this was probably the Case, because nobody in the Ship remembered the Shock. Several able Workmen on the Spot assured me, that, with a Hammer of a Quarter of an Hundred Weight, they could not drive in a Pin of Iron, of the same Form and Size, into such  
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sort of Wood, and to the same Depth, in less than Eight or Nine Strokes.

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XXXI. *Abstracts of the original Papers communicated to the ROYAL SOCIETY by Sigismond Augustus Frobenius, M. D. concerning his Spiritus Vini Æthereus: Collected by C. Mortimer, M. D. Secr. R. S.*

**D**R. *Frobenius* being dead, and some learned Chemists at *Paris*, in *Germany*, and in *Italy*, having endeavoured, in various Manners, and with different Contrivances, to make this *Æthereal Spirit*; I thought it would be acceptable to the Curious in *England*, to give them an Abstract of the Three Papers the Doctor communicated to the ROYAL SOCIETY concerning his *Spiritus Vini Æthereus*. The First he gave in on *Feb. 19. 1729-30.* along with what is printed in N<sup>o</sup> 413. p. 283. of these *Transactions*, but was desired by the Author not to be published at that Time. In this Paper he says, you must “ take of  
 “ Oil of Vitriol, and the highest rectified Spirit of Wine,  
 “ equal Parts by Weight, not by Measure: That the  
 “ Oil of Vitriol was to be poured by little and little  
 “ into the Spirit of Wine, because they will grow hot  
 “ upon mixing; that they should be shaken often, that  
 “ they may mix thoroughly; then to be digested gently  
 “ in a glass Retort, and a large Receiver to be applied  
 “ and luted on, lest the subtile Spirits should fly away:  
 “ Then distil them in an *Athamor*, in gentle Digestion,  
 “ for Three Days; and pour back the distilled Liquor,  
 “ till

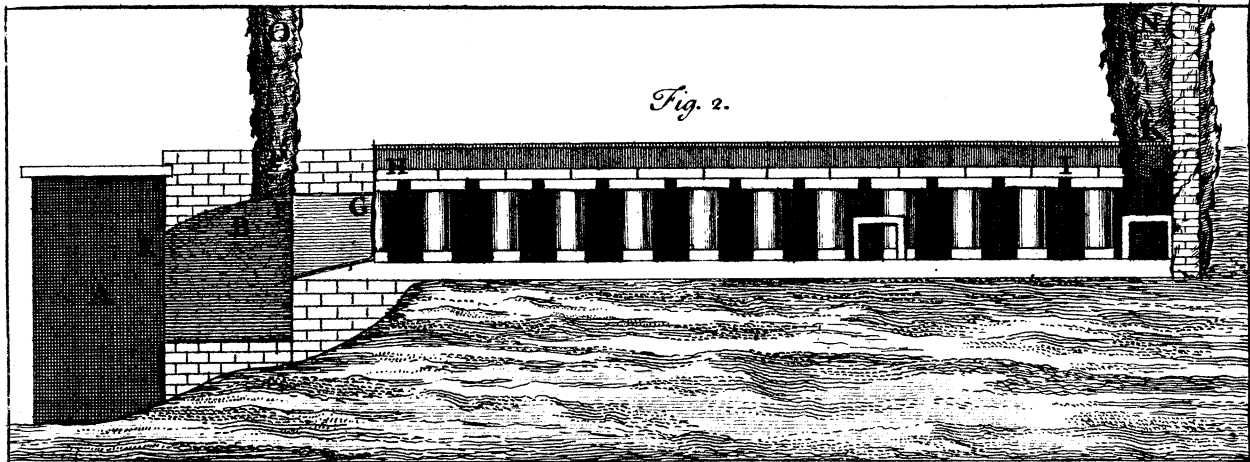


Fig. 2.

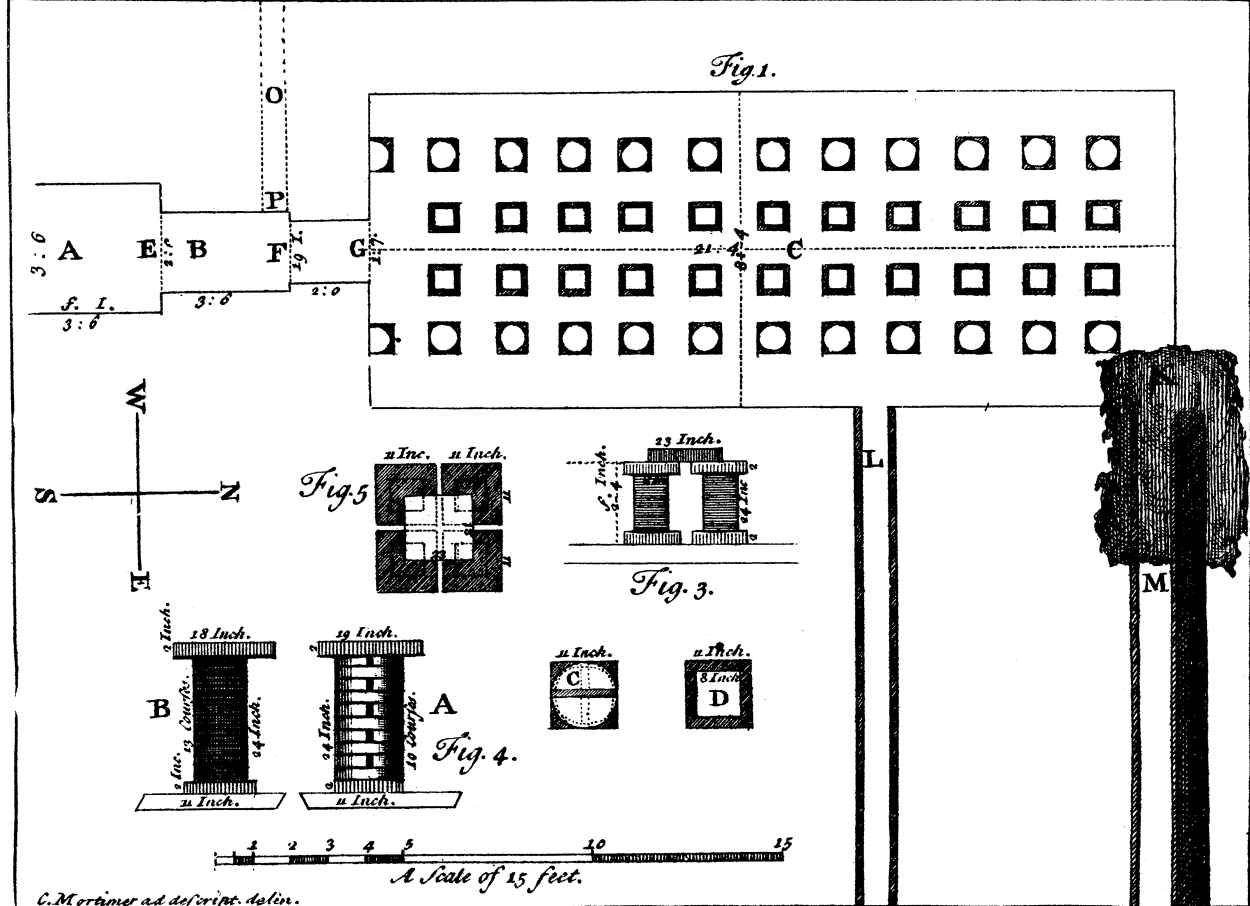


Fig. 1.

Fig. 5.

Fig. 3.

Fig. 4.

A Scale of 15 feet.

C. Mortimer ad descript. solen.

- A The Timber.*
- B The Plank.*
- C The Sheathing.*

*Fig. 6.*



*Fig. 7.*



*Fig. 8.*

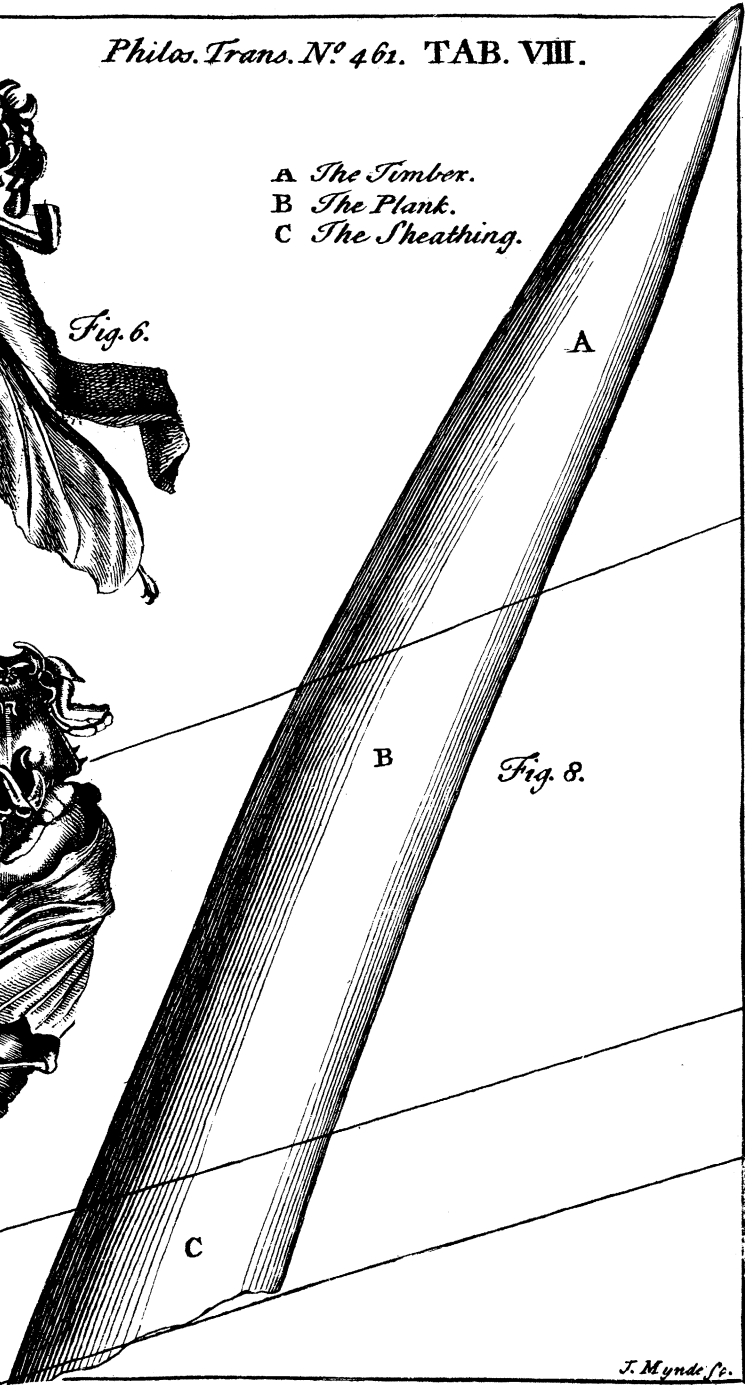


Fig. 2.

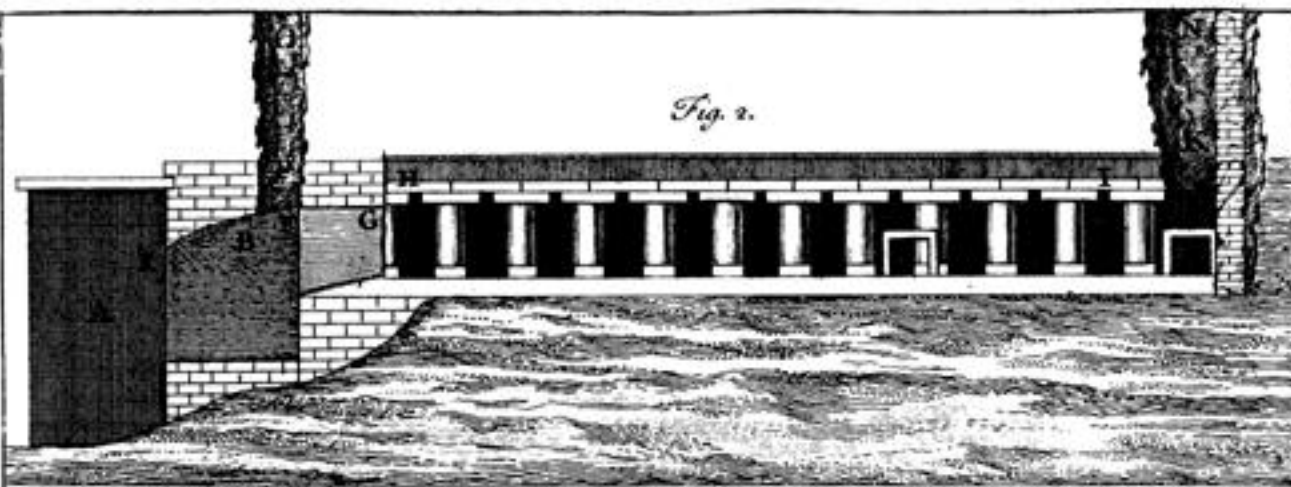
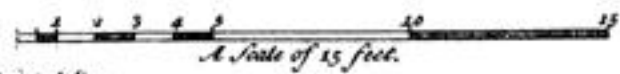
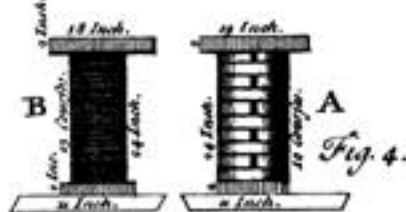
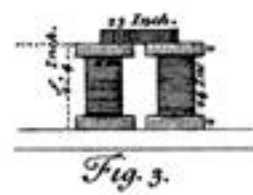
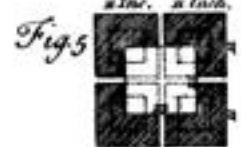
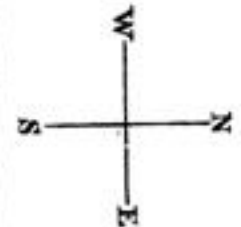
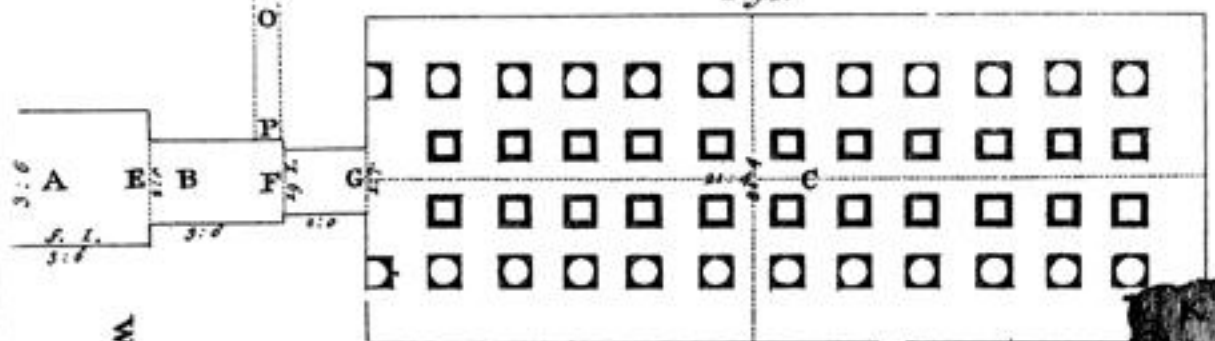


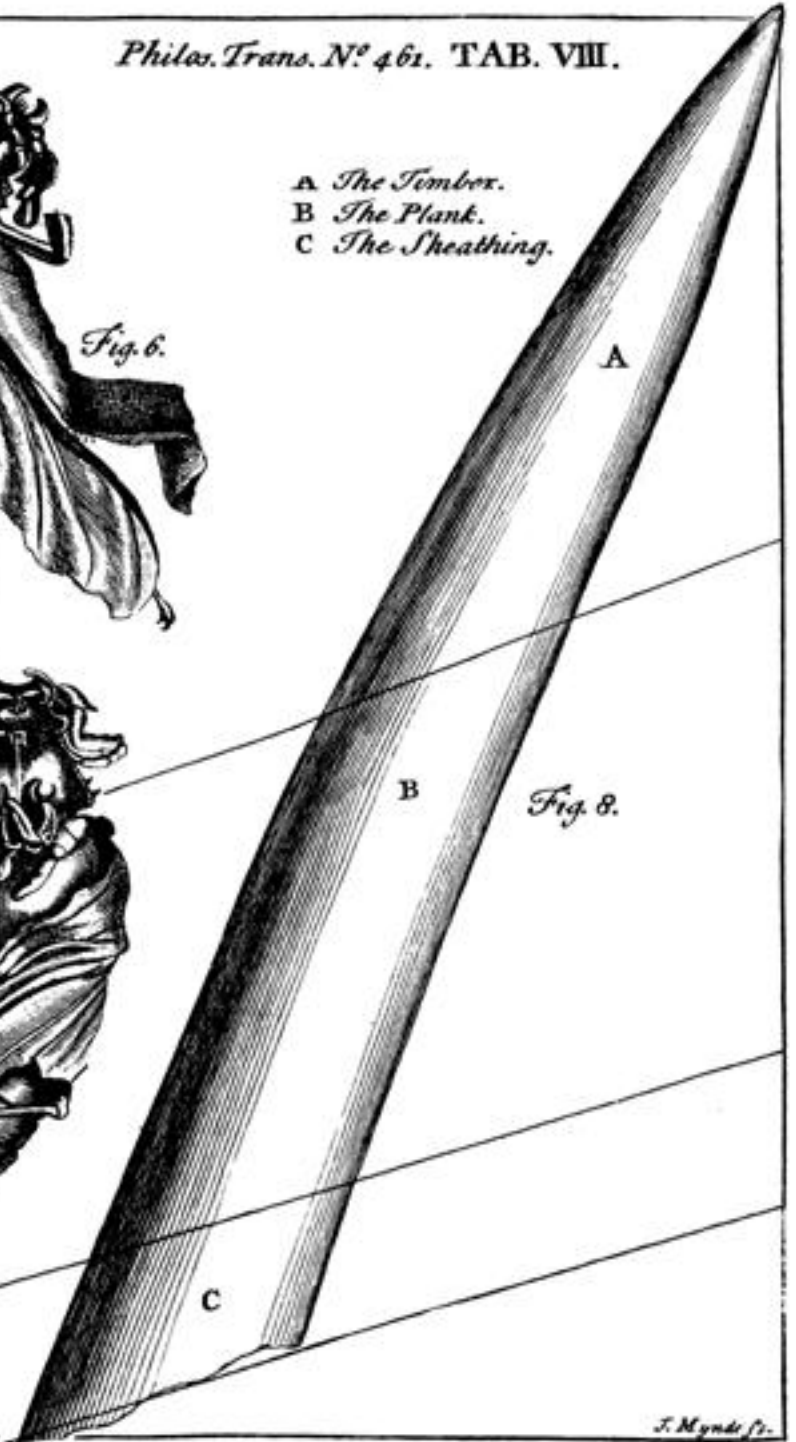
Fig. 1.



C. Mercurius ad. Descript. Galin.



- A The Timber.
- B The Plank.
- C The Sheathing.



J. Mynde sc.