At preſent I am finiſhing another. Inſtead of four points it playeth on one Steel point, ſtanding on a Diamond: the making of which I do intend to publiſh. I hope it will be of great uſe for its exactneſs and ſpeedineſs of working.

I am at preſent making a ſilver Planiſphere of two foot diameter for the King; the Invention of that famous Aſtronomer, and my very good friend, Mr. *Caſſini*. It ſheweth a very eaſie way to know and find out moſt of the fixed Stars, and the hour of the night very ſpeedily.

Extract of a Letter from Mr. John Conyers, *of his Improvement of Sir* Samuel Moreland's *ſpeaking Trumpet, &c.*

HAving ſome years ſince try'd to make one of Sir *S. Moreland's ſpeaking Trumpets* of Tin, that is, tinned Iron Plate; and finding it to ſerve, as well as Copper or Glaſs; I thereupon thought of ſeveral ways for reducing the ſame into ſome more contracted form, without abating its power: and by Dr. *Goddard* preſented to the Royal Society, at one of their Meetings (then uſually at *Arundel Houſe*) the *Reflecting Trumpet* here figured. It conſiſteth of two Parts. The utmoſt (B b) is a large *Concave Pyramid*, about a yard long, (or may be of any managable length) open at the *baſe* (b), and cloſed, not with a *flat*, but a *concave head*, at the *Cone* (B). Within this is faſtned a bended *Tube* (A a) as in the *Figure*. In the preſence of the *Royal Society* it was then alſo experimented, That this *Trumpet* did diſtinctly deliver certain words from the ſaid Houſe croſs the Garden, and the River *Thames*, and that againſt the *Wind* which was then ſtrong: and the words were written down by one that was ſent over for that purpoſe. Whereby it appeared, That a *Reflecting Trumpet* after this or ſome other like manner, of Wood, Tin, Pewter, Stone or Earth, or which may be beſt, of Bell mettle, will carry the voice as far, if not farther, than the *long* one invented by Sir *Samuel Moreland*. Beſides that it ſeems to take off from the aſtoniſhing noyſe near at hand, which happens in the uſe of the ſaid long Trumpet; ſo that it may be uſed within doors, with advantage, upon ſeveral occaſions.

Some

Some other trials were made to effect the above mentioned Contraction, which were found not to anſwer. Yet becauſe they may ſerve, in ſome part, to ſhew the motion of ſound, I have added two Examples hereof. The firſt is Sir *Samuel Moreland*'s Trumpet Angularly Arched in the middle; the ſecond, with three large Angular Arches reaching almoſt from one end to the other, as in the *figures*: by the former of which the delivery of ſound, to any diſtant or remote place is much ſhortened; but by the latter almoſt wholly obſtructed.

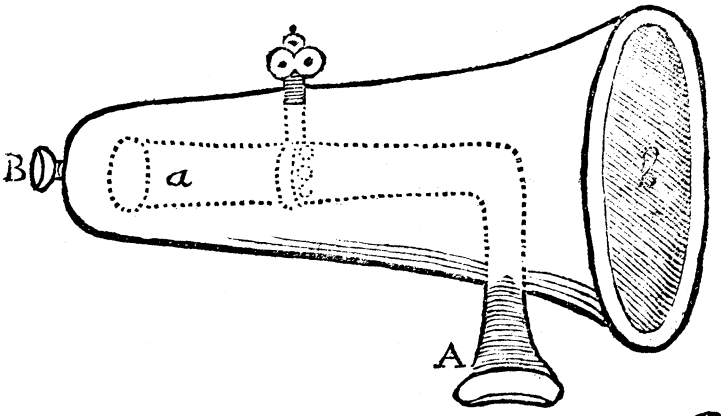


Fig. I.

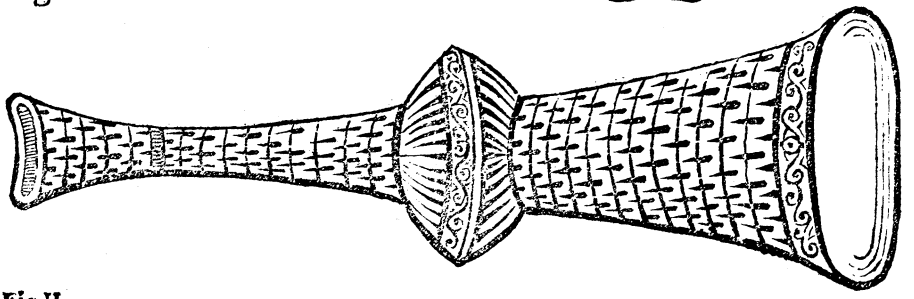
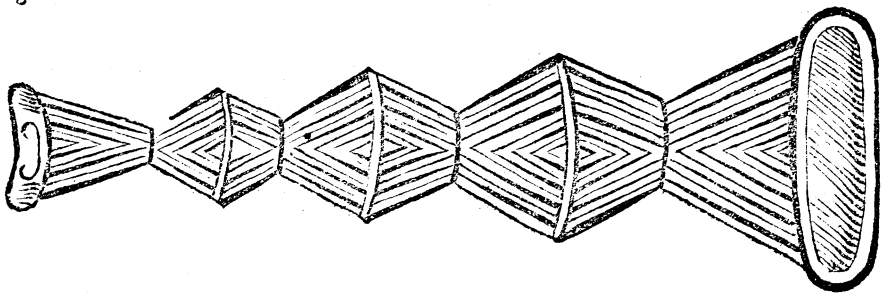
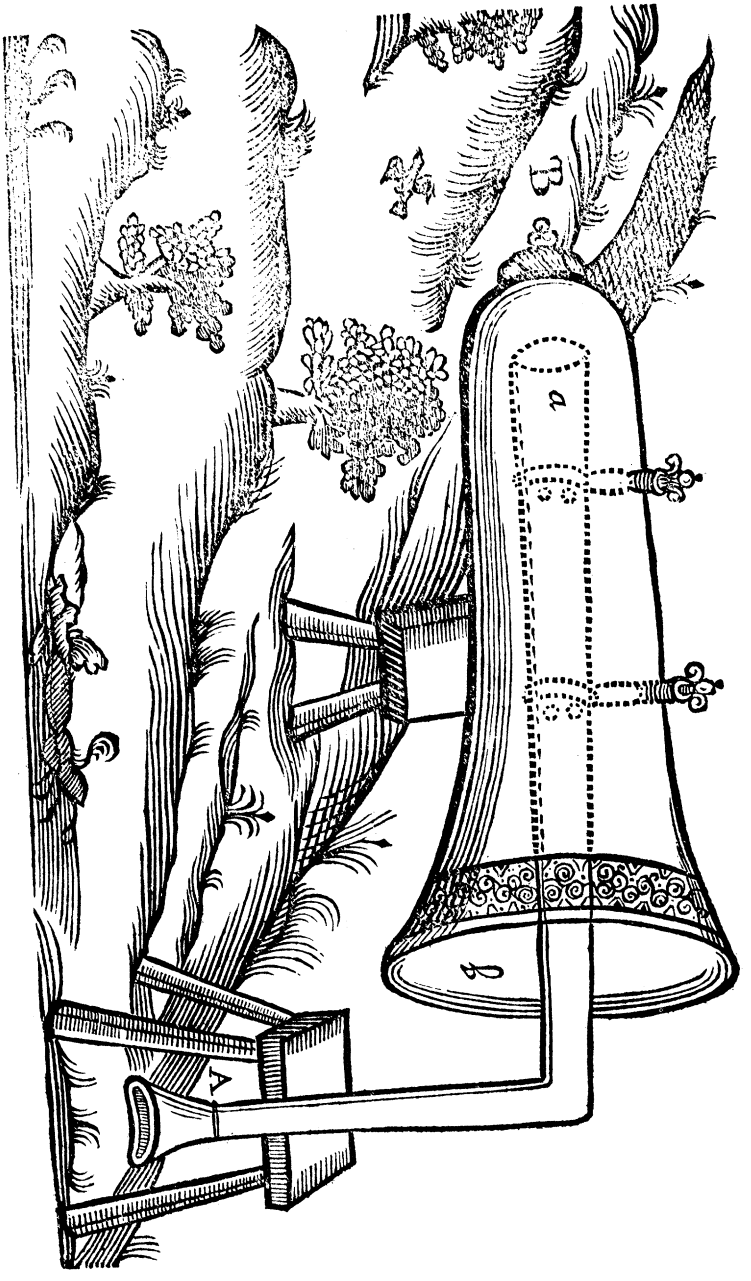


Fig. II.




B
a
b
A