VII.

The Invisible Lady; being an Explanation of the Manner in what the Experiment which was exhibited in London, by M. Charles and others, is performed. In a Letter from a Correspondent.

The experiment of the Invisible Girl has not yet been published.

As the acoustic experiment of the Invisible Girl, which has excited so much attention and curiosity, does not appear to have been hitherto explained in any publication, I have sent you the following drawing and description of the manner in which it is performed. I must, however, in justice observe, that the conduct of this experiment has been kept in the most profound secrecy by the exhibitors, and that my information was obtained from the account given of it by Mr. Millington, in one of his philosophical lectures, last winter, in Chancery-lane; where I witnessed the experiment in its full effect; and by a comparison of his account with the exhibition which I have since visited, and find perfectly to agree with his description, I am fully convinced they are one and the same thing. If therefore you think the account I send you worthy of insertion in your valuable Journal, it is quite at your service, and it may perhaps afford information, and gratify the curiosity of some of your readers.

It was explained by Mr. Millington in his lectures.

I am, Sir, your's, &c.

X.

The apparatus consists of four metallic trumpets connected with an hollow ball.

Fig. 1, plate 2, represents a perspective view of all the visible apparatus of the Invisible Girl as you enter the room. It consists of a mahogany frame, not very unlike a bedstead, having four upright posts *a a a a*, about five feet high, at the corners, which are united by a cross rail near the top, *b b*, and two or more cross rails near the bottom, to strengthen the frame: these are about four feet in length. The frame thus constructed stands upon the floor, and from each top of the four pillars *a a a a* spring four strong bent brass wires, converging at the top *c*, where they are secured by a crown and other ornaments. From these four wires a hollow copper ball, of a foot in diameter, is suspended by slight ribbons so as to cut off all possible communication with the frame. This globe is supposed to contain the in-

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visible being, as the voice apparently proceeds from the interior of it; and for this purpose it is equipped with the mouths of four trumpets, placed round it in an horizontal direction, and at right angles to each other, as may be more distinctly seen at fig. 2, where *g* is the globe, *d d d d* the trumpets, and *b b b b* the frame surrounding them, being about half an inch from them. When a question is proposed, it is asked from any side of the frame, and spoken into one of the trumpets, and an answer immediately proceeds from all the trumpets, so loud as to be distinctly heard by an ear addressed to any of them, and yet so distant and feeble, that it appears as if coming from a very diminutive being. In this the whole of the experiment consists, and the variations are, that the answer may be returned in several languages, a kiss will be returned, the breath, while speaking, may be felt, and songs are sung either accompanied by the piano forte, &c.

—and the sounds seem to proceed from the trumpets.

After describing the manner in which this effect is brought about, it will immediately appear that the whole deception consists in a very trifling addition to the old and well-known mechanism of the Speaking Bust, which consists of a tube from the mouth of a bust, leading to a confederate in an adjoining room, and another tube to the same place, ending in the ear of the figure. By the last of these, a sound whispered to the ear of the bust is immediately carried to the confederate, who instantly returns an answer by the other tube, ending in the mouth of the figure, who seems to utter it: and the Invisible Girl only differs in this one circumstance, that an artificial echo is produced by means of the trumpets; and thus the sound no longer appears to proceed in its original direction, but it is completely reversed. The apparatus necessary to produce this effect, is seen in fig. 3, where *bb* represent two of the legs of the frame, one of which, as well as half the hand-rail, is made into a tube, the end of which opens in the rail immediately opposite the center of the trumpet. This hole is very small, and concealed by reeds or other mouldings, and the other end communicates by a long tin half-inch pipe, *p p*, concealed under the boards of the floor, *f f*, and passing, concealed, up the wall of the room to a large deal case, *k*, almost similar to an inverted funnel, large enough to contain the confederate,

But the sound is really conveyed by a tube.

Description of the tube and other apparatus.

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and a piano-forte. Any question asked into one of the trumpets, will be immediately reflected back to the orifice of the tube, and distinctly heard by a person in the funnel, and the answer uttered by them, or a song or tune from the piano-forte will be distinctly heard at the mouths of the trumpets, but no where else, and there it will seem to come precisely from the interior of the globe. A small hole closed with glass is left through the funnel and side wall of the room, as at *w*, by means of which the concealed person has an opportunity of observing and commenting upon any circumstance which may take place in the room.

VIII.

Mr. WILLIAM RUSSEL, *of Newman Street, has offered Proposals for publishing, by Subscription, two Engravings of the* MOON IN PLANO. *By the late* JOHN RUSSEL, *Esq. R.A. with the following adress.*

THE late Mr. Russel, celebrated amongst men of science for the production of the Lunar Globe, left, at his death, two Lunar Planispheric Drawings, the result of numberless telescopic observations scrupulously measured by a micrometer: one of which Drawings exhibits the Lunar Disk in a state of direct opposition to the sun, when the eminences and depressions are *undetermined*, and every intricate part, arising from colour, form, or inexplicable causes, is surprisingly developed and exquisitely delineated; and the other, of precisely the same proportion, represents the eminences and depressions of the moon *determined* as to their form with the utmost accuracy, producing their shadows when the sun is only a few degrees above the horizon of each part. The former of these was beautifully and most correctly engraved by Mr. Russell, who had likewise very considerably advanced in the engraving of the latter, when death terminated his labours: it is, however, left in such a forward state, that it will be finished with the greatest exactness, and all possible dispatch.

Mr. William Russell, son of the late Mr. Russell, proposes to publish, by subscription, these lunar plates, which have been

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ARTICLE I.

Description of a very simple and useful Scale, for dividing the Vanishing Lines in Perspective. In a Letter from G. CUMBERLAND, *Esq.*

To Mr. NICHOLSON.

SIR,

A VARIETY of occupations and speculations have of late forced me to neglect some former engagements, to use my poor endeavours in promoting the laudable ends of your truly interesting publication. Introduction.

But that I may not be thought to have entirely forgot them, I send you the following trifle, which, however simple the idea, will, I am sure, be the more valued by you on that very account, if I have justly estimated the noble simplicity of your intelligent mind.

Having been in the habit of drawing for my amusement all my life, and feeling the value of that acquirement, it has been my practice to recommend to others as much of that acquisition as can with very little trouble be attained; I mean the putting into perspective common objects; such as simple landscapes, machines, buildings, and the interior of apartments, manufactories, &c. And where I have had an opportunity to The valuable art of Perspective.

B

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