

tal principle of phrenology, which makes size the measure of power.

In these observations I do not wish to be understood as undervaluing general cranial development; I recognise the *brain* as the seat of intellect, and consider that an imperfect development of it is incompatible with high mental acquirements; but such a view is perfectly distinct from the theory of the *localization of organs*,—from the mapping out of the head into distinct compartments, and assigning to each place a particular mental quality.

ART. X.—*Percussor Stethoscope*. By B. WILLS RICHARDSON,
F. R. C. S. I.

IN the twenty-sixth volume of the Dublin Medical Press, 1851, page 382, I described a form of stethoscope which admitted of being used as a substitute for Dr. Winterich's copper hammer. I considered that an instrument combining both the stethoscope and percussor in one, might be received with favour^a.

The description was not accompanied by an illustration; but as this form of instrument was subsequently approved of and adopted by some of our most practised stethoscopists, I have been induced to publish the annexed drawing of it.

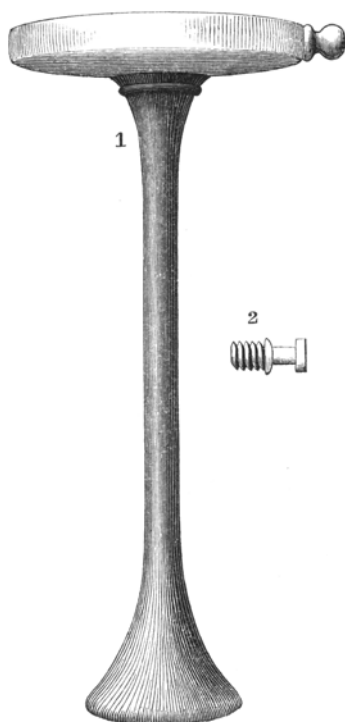
The ear-piece, I am now of opinion, should be made of ivory, from about two-eighths to three-eighths of an inch thick. Into its outer edge a small nipple of the same material, and similar in form and size to Fig. 2, should be screwed and properly cemented. A piece of vulcanized Indian-rubber, of about an eighth of an inch in thickness, and of the same diameter as that of the percussing end of the nipple, should next be glued to this end, and then another piece be drawn tightly over the nipple, and tied securely round its neck. Fig. 1 shows the instrument complete.

Some makers, instead of the nipple, have substituted that part of Dr. Winterich's hammer which contains the Indian-rubber; but I prefer the former, as it may be used with either the pleximeter or naked finger.

It is almost superfluous to say, that the stethoscope should

^a Sir Henry Marsh was the first to introduce a stethoscope with this combination. His instrument consists of an ear-piece grooved on its outer edge, into which there is inserted a solid vulcanized India-rubber ring; the shank is made of wood.

be well made; for if the percussing parts are not firmly put together there will be a rattle when it is used.



The shank may be formed of wood.

Mr. Read, of Parliament-street, made the instrument from which the engraving is taken.