location of this fissure may be determined. Without considering all of them, there are two or three of which it is worth while to briefly speak. First, it is necessary to accurately mark out two or three prominences about the skull as points of departure: the root of the nose, known in this sense as the *glabella;* the external occipital protuberance, known also as the *inion;* the point at the vertex of the skull, half way between these two prominences, the *bregma;* the external angle of the orbit, the tip of the mastoid process, the lower border of the alveolar process of the upper jaw—these are all landmarks of importance in one or the other of the methods referred to. Before endeavoring to make out any of the deeper fissures, by external aids, the scalp should have been shaved. The fissure of Rolando has its upper end about five centimetres back of the bregma, but it does not run quite up to the middle line; its lower end lies about half a centimetre behind the auriculo-bregmatic line and a little above an imaginary horizontal line, parallel to the alveolar-condyloid line, projected backward from the superciliary ridge; thus the lower end of the Rolandic fissure will be found about six centimetres above and a little behind the external auditory canal—in other words, its lower end is about an inch behind the bifurcation of the fissure of Sylvius.

Mr. Hare, of Edinburgh, has shown in the *Lancet* (March 3, 1888, page 408) that the distance of the upper end of the fissure of Rolando is fifty-five and seven-tenths per cent. of the total distance from the glabella to the inion; also that the angle formed by the fissure with the middle line of the skull is sixty-seven degrees. The fissure itself extends about three inches and three-fourths along this line, running from above downward and forward.

At the suggestion of Professor Chiene, Dr. Wilson constructed a scale of measurements for localizing fissures according to these data, and which is known as Wilson's *cyrtometer;* a home-made instrument of this kind I show you here. One strip passes coronally around the forehead, being fitted over the glabella and external angular process; another strip, at right angles, passes backward from the glabella to the inion. This strip is marked with two scales of letters, and these are located at points accurately marked out, according to the proportion of fifty-five and seven-tenths to one hundred. Should the distance of the inion from the glabella be found to be at a point marked with a capital *C*, the sliding scale on the instrument is put at a corresponding point marked with a small *c*; from this a projecting arm, fixed at an angle of sixty-seven degrees, will be easily bent down, directly over the Rolandic fissure, and with an aniline pencil this may be traced on the surface of the scalp. Accurately speaking, the fissure of Rolando is not a perfectly straight line, inasmuch as it forms a slight curvature opposite the lower end of the intraparietal sulcus, its lower half being directed a little more vertically; nevertheless, the line thus marked out will be sufficiently accurate for surgical purposes.

The bifurcation of the fissure of Sylvius corresponds to a point an inch and a quarter behind and a quarter of an inch above the level of the external angular process of the frontal bone.

The fissure of Sylvius divides into a short anterior and long posterior branch; it commences an inch back of the external angular process, along a line drawn from this process to the occipital protuberance; from this point a straight line to the center of the parietal eminence marks with considerable accuracy the course of the posterior limb of this fissure.

The H-shaped junction of the parietal, the great wing of the sphenoid, the frontal and the squamous bones was termed the *pterion* by Broca. The point of division of the fissure of Sylvius is just underneath the pterion. The line of the posterior branch has just been indicated; the anterior branch runs upward and forward almost underneath the line of the sphenoido-squamous suture. This anterior branch is important; it is the anterior boundary of the so-called motor region, while the posterior branch bounds the same area inferiorly. The precentral or vertical sulcus, which is not a fissure, is of importance, because it divides two convolutions of very different function, and because on each side of it are ranged convolutions in which exist the most extensive variety of motor functions. It runs parallel with and just behind the coronal suture, passing upward and slightly backward, reaching about to the center of the fissure of Rolando, and there bending forward. The inferior frontal sulcus is about opposite the temporal ridge, where it crosses the coronal suture at the point