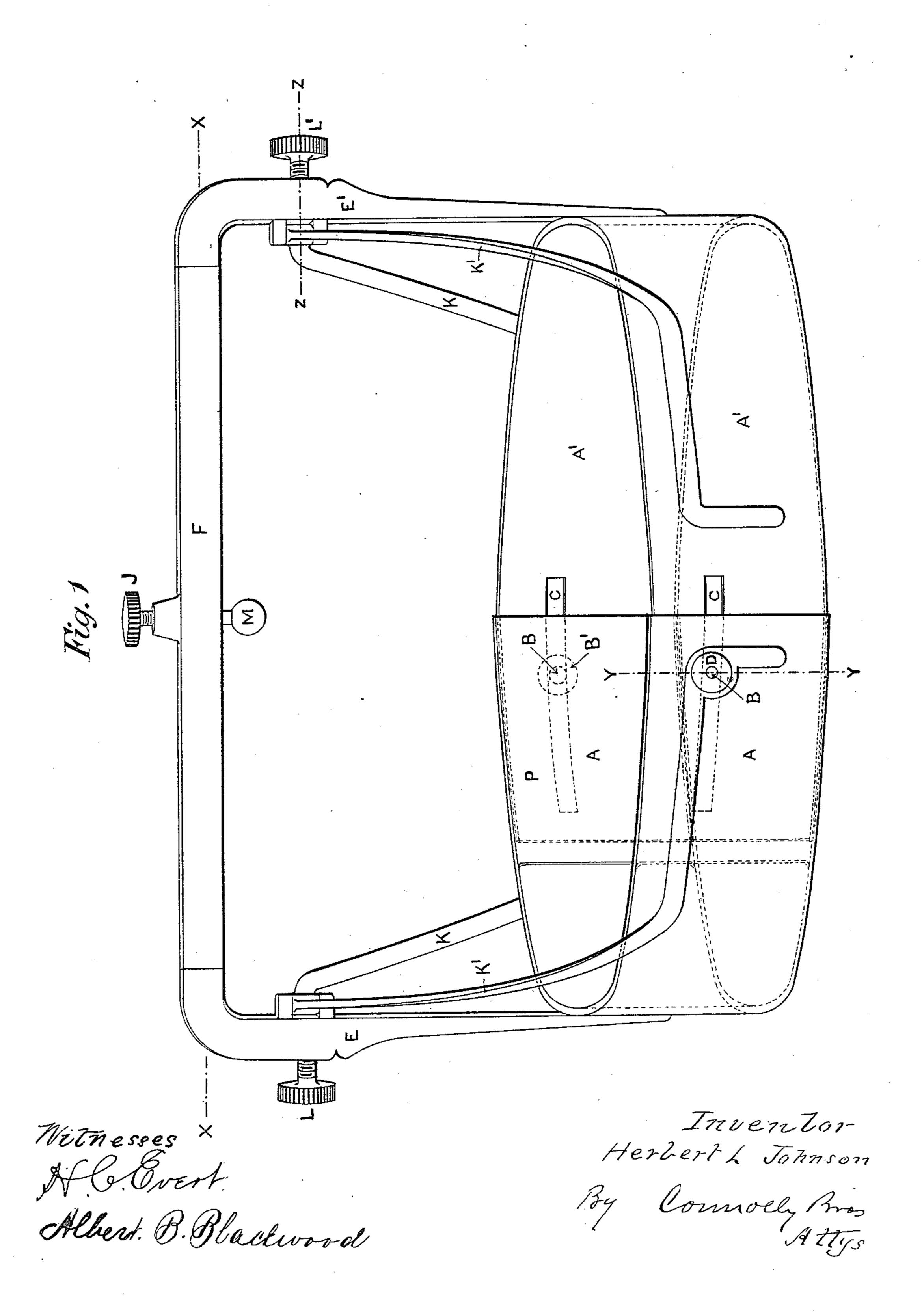
(No Model.)

H. L. JOHNSON. HATTER'S MEASURE.

No. 424,481.

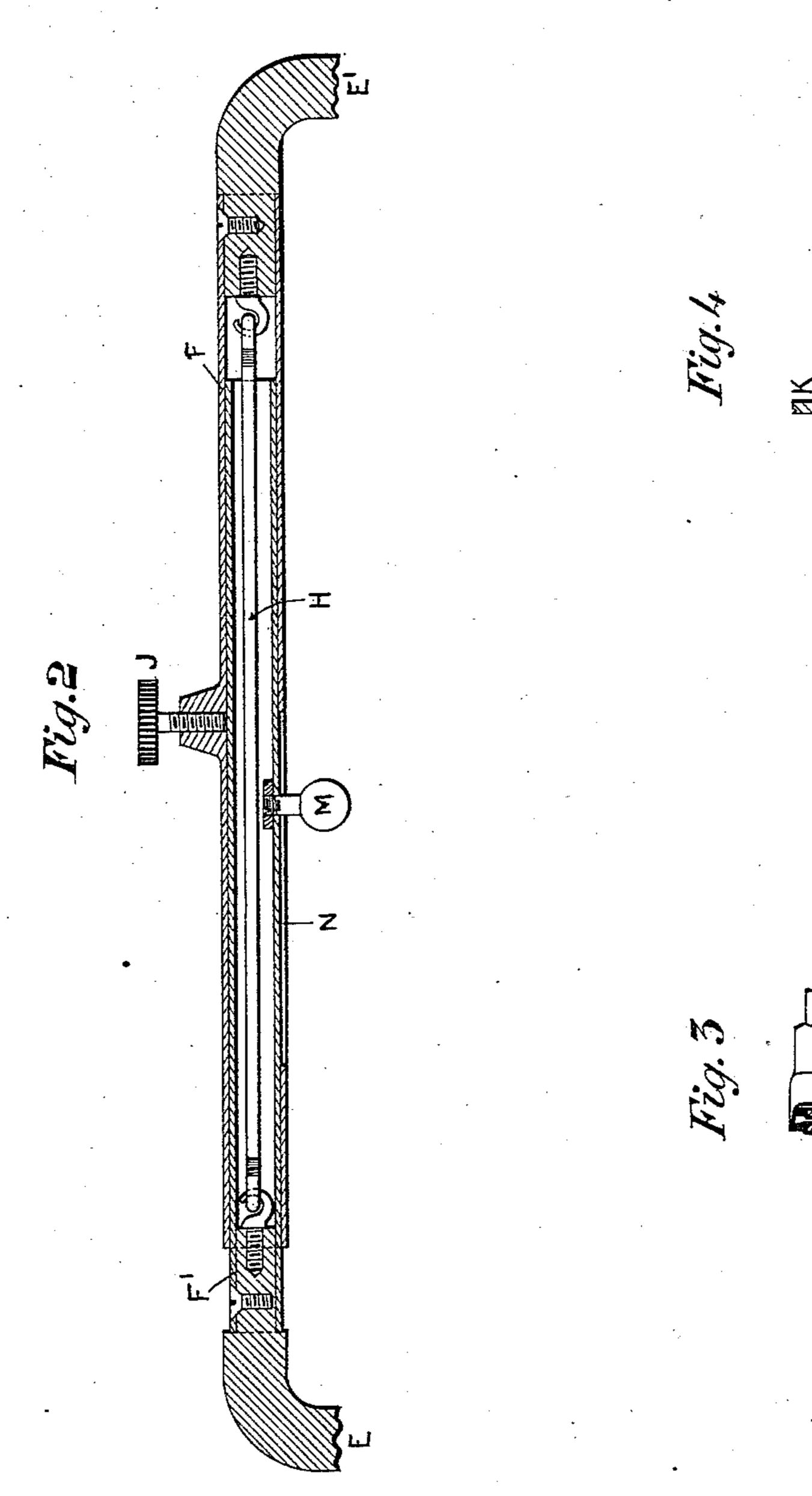
Patented Apr. 1, 1890.



H. L. JOHNSON. HATTER'S MEASURE.

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Witnesses Albert B. Blackwood Inventor-Herbert I. Johnson By Connoll, Bros Alty,

United States Patent Office.

HERBERT L. JOHNSON, OF LONDON, COUNTY OF MIDDLESEX, ENGLAND.

HATTER'S MEASURE.

SPECIFICATION forming part of Letters Patent No. 424,481, dated April 1, 1890.

Application filed March 7, 1889. Serial No. 302,273. (No model.)

To all whom it may concern:

Be it known that I, HERBERT LEWIS JOHNson, a subject of the Queen of Great Britain, residing at 40 Piccadilly, London, W., in the 5 county of Middlesex, England, have invented certain new and useful Improvements in Apparatus for Measuring Heads for the Use of Hatters; and I do hereby declare the following to be a full, clear, and exact description 10 of the invention, reference being had to the accompanying drawings, which form part of this specification.

The object of my invention is to effect improvements in the flexible or plastic metallic 15 bands heretofore employed in obtaining measurements and contours of the head. Such metallic bands are commonly made of sheet-lead covered with leather, and are placed around the head and pressed with the hands until 20 they fit closely all around. They are then removed and placed upon a sheet of paper or other suitable material, and a templet drawn from them, which forms an exact copy of the contour of the head, and hats made from such 25 templet are necessarily a perfect fit. It is, however, found in practice that much skill is required in removing the band from the head and placing it upon the paper to avoid distortion of the band and consequent inaccu-30 racy in the templet; and my invention consists, essentially, in the combination, with such bands, of suitable appliances by means of which when the band has been fitted to the head, it can be removed therefrom and freely 35 handled without changing its form.

In the accompanying two sheets of drawings, Figure 1 is a perspective elevation of my improved apparatus. Figs. 2 and 3 are sectional elevations through the lines X X and 40 YY; and Fig. 4 is a sectional plan through

the line Z Z in Fig. 1.

The sheet-lead band is formed in two parts A A' and covered with leather, as indicated by the thick lines in Fig. 3. The ends over-45 lap at the sides of the head. A hole is formed in each end of the piece A and a slot C in each end of the piece A'. A screw B, provided with a head B' and a nut D, is passed through the hole and slot on each side, so that by 50 tightening the nuts D the pieces A A' can be

bars E E' are fixed to the front and back of the band, their upper ends being connected by two metallic tubes F F', preferably square in cross-section, sliding one within the other, 55 and drawn together by an india-rubber or other suitable spring H. A screw J, passed through a tapped boss on the tube F and bearing on the tube F', is provided to secure the tubes in any required position. To each 60 of the bars E E' a pair of arms K K' is pivoted, the lower ends of these arms being secured to the band. Screws L L' enter tapped holes in the bars E E', their ends when screwed up wedging between the pivoted ends 65 of the arms K K', as shown in Fig. 4, and locking them in position. A small knob M is fixed to the tube F', its shank passing through a slot N in the tube F, so that by placing the fingers in contact with this knob 70 and the screw J a convenient means is provided for adjusting the position of the tubes F F' with one hand. A piece of leather P is affixed to the inside of each end of the piece A to form a guide and cover for the ends of A' 75 and insure a smooth joint.

The apparatus is used in the following manner: The nuts D, screws J, L, and L' being all slackened, the band A A' is placed upon the head in the position to be occupied by the hat. 80 The spring H causes the halves of the band A A' to grip the head, and the band is then pressed in all round until it fits properly to the head. The screws and nuts are then all tightened up, which has the effect of holding 85 the band securely in the shape to which it has been molded, so that it can be removed from the head by the tubes F F', which form a convenient handle, and placed upon the paper for marking the templet without risk or altera- 90

tion in form.

The tubes F F' are marked with divisions in the same manner as an ordinary hatter's rule, so that when the hand is fitted to a head the exact length of the head is recorded on the 95 said tubes, and the circumferential measure is shown at the same time by means of divisions marked on the inside of the band. The band is represented as flat or having its edges in horizontal planes; but as hats are ordina- 100 rily constructed deeper at the front and back secured firmly together. Vertical metallic I than at the sides, I may, if desired, make the

band in an arched or curved shape to conform thereto.

My improved apparatus constitutes a rapid and perfectly accurate means, which can be used by unskilled persons for obtaining templets for the manufacture of hats.

Having fully described my invention, what I claim, and desire to secure by Letters Patent, is—

10 1. A device for obtaining measurements and contours of the head, consisting of a flexible metallic band A A', in combination with vertical bars E E', attached to said band, horizontal tubes F F', connected to the bars E E', and a screw J, inserted in one of said tubes

and abutting against the other, substantially as herein set forth.

2. A device for obtaining measurements and contours of the head, consisting of a flexible metallic band A A', in combination with 2c vertical bars E E', horizontal tubes F F', a screw J, and two pairs of arms K K', with screws L L', all arranged substantially as herein set forth.

In testimony that I claim the foregoing I 25 have hereunto set my hand.

HERBERT L. JOHNSON.

Witnesses:

CHAS. ROCHE, WM. F. MILLER.