

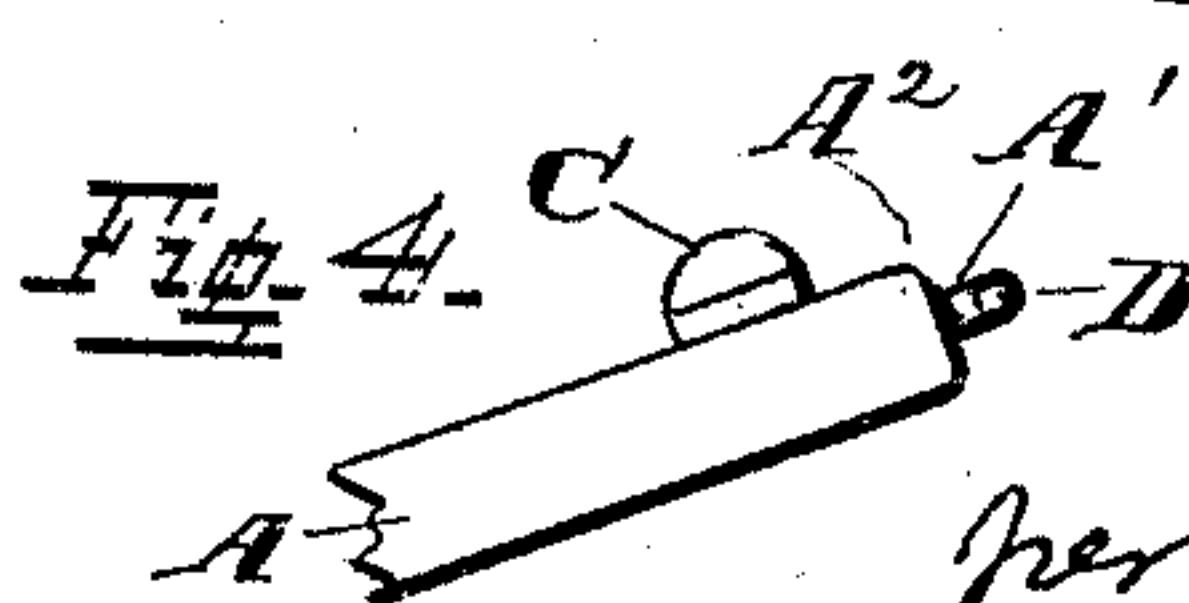
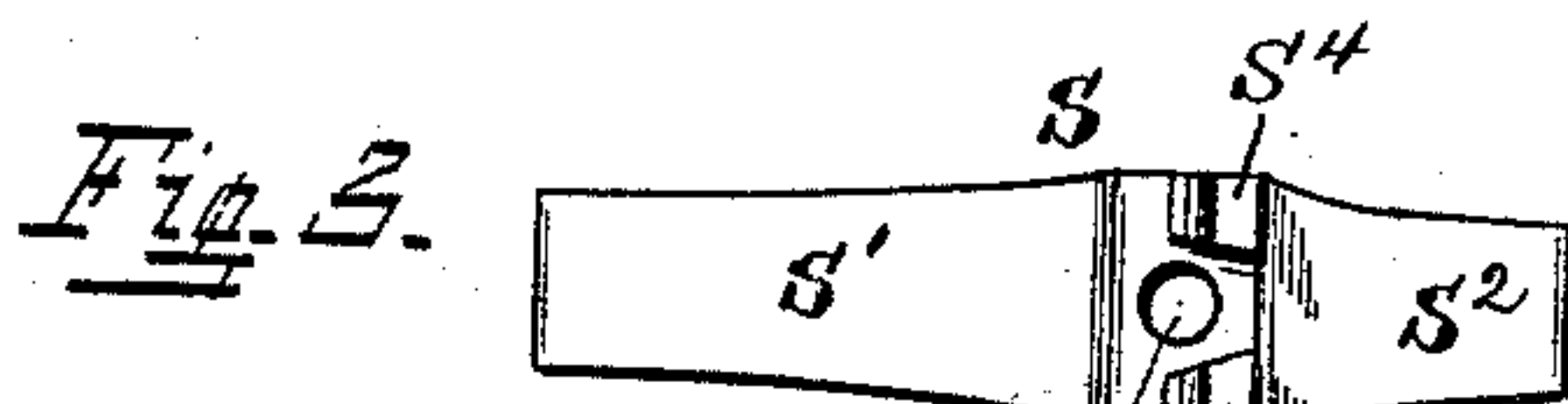
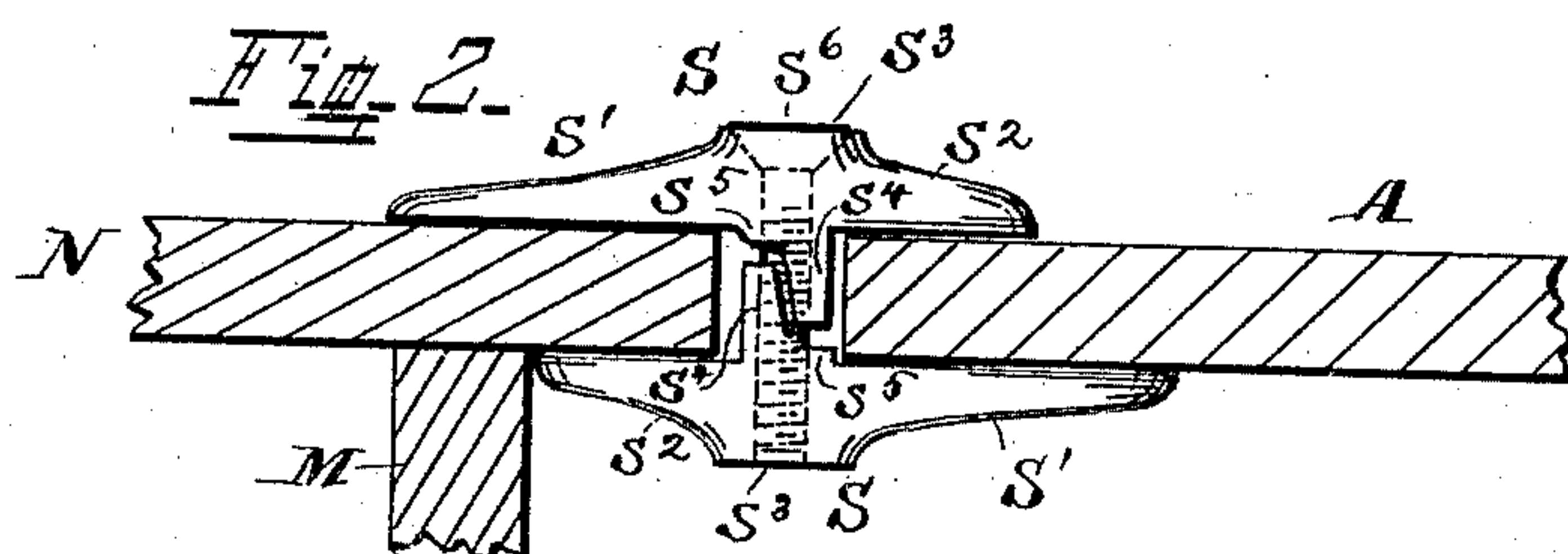
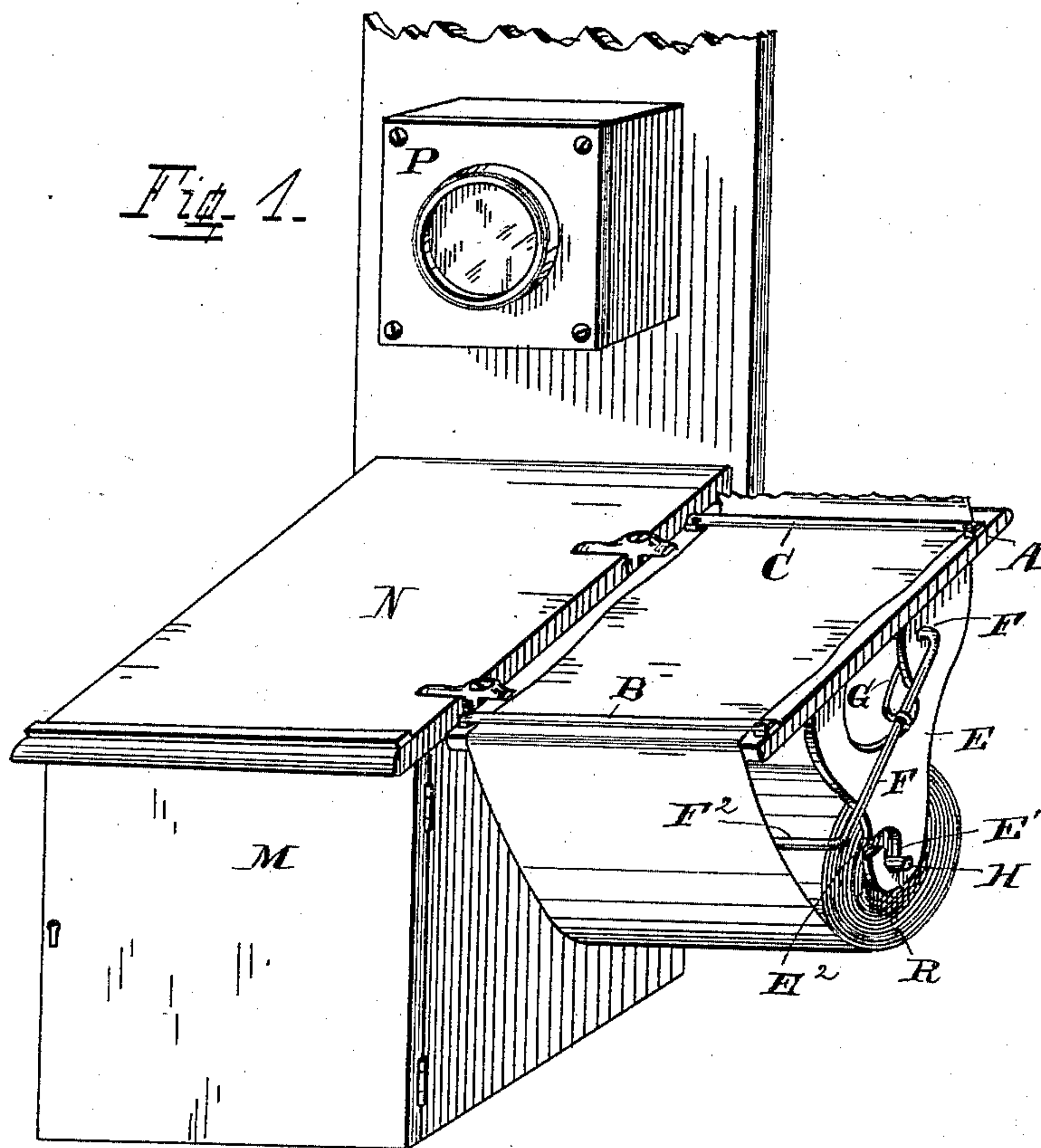
(No Model.)

J. B. MORRIS.

TABLET FOR TELEPHONES AND CLAMP ATTACHMENT FOR THE SAME.

No. 426,462.

Patented Apr. 29, 1890.



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TABLET FOR TELEPHONES AND CLAMP ATTACHMENT FOR THE SAME.

SPECIFICATION forming part of Letters Patent No. 426,462, dated April 29, 1890.

Application filed February 14, 1890. Serial No. 340,482. (No model.)

To all whom it may concern:

Be it known that I, JOHN B. MORRIS, a citizen of the United States of America, and a resident of the city of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Tablets for Telephones and in the Clamps for the Attachment of said Tablets to Telephones, of which the following is a specification.

The several features of my invention and the various advantages accruing from their use, conjointly or otherwise, will be apparent from the following description and claims.

In the accompanying drawings, making a part of this application, and to which reference is hereby made, Figure 1 is a view in perspective of a tablet and attachments embodying the several features of my invention, and showing the application thereof to the box containing the battery of the telephone at one end of the line. Fig. 2 is an elevation of a novel clamp of my invention, and showing in vertical section a portion of the tablet and a portion of the telephone battery-box adjacent to said clamp. The section is taken in a line parallel to the side of the clamp and near to the latter. This figure shows how the clamp is connected to the tablet and the battery-box and the mode in which it holds them securely together. Fig. 3 is a view of the inner side of one of the duplicate pieces which together form the clamp. Fig. 4 is an elevation of that edge of the tablet which is at the upper right-hand corner of the tablet in Fig. 1, and showing in position on the tablet the upper cutter-bar and the supplemental bar.

While my invention in its various features is applicable in many situations and for many purposes, it is primarily adapted for use in connection with telephones and that class of speaking-tubes and the like where one hand of the operator is engaged with the tube or receiver through which sound is transmitted to the ear. Thus, in the case of the telephone, one hand of the receiver of messages is ordinarily employed in holding the receiver to the ear, and in the case of many speaking-tubes one hand is employed in holding an elastic tube to the ear, or in pressing back a diaphragm which, impelled by elastic pressure, automatically closes the tube whenever the hand of the operator is withdrawn from it.

A indicates a small table or tablet, preferably inclined, as shown. This table is suitably supported, preferably as hereinafter set forth. In the case of the telephone the box M, containing the battery, is ordinarily present and located a short distance below the transmitter P. The top N of the battery-box M is ordinarily inclined, as shown, and the tablet A has the same inclination. The edge of the top piece N of the box M projects beyond each vertical side of the box M, and the tablet is connected to the edge on the one or the other side of the box M by a novel and useful clamp, hereinafter to be described.

I will now first proceed to describe the tablet and the mechanism accompanying it for upholding the paper roll, the brake for retarding the revolution of said roll, the guides for giving direction to the paper, and the cutters for cutting the same.

At the sides of the tablet are secured two brackets E, parallel to each other and at a sufficient distance apart to freely admit between them a roll of paper of the desired width for use in connection with the said tablet. One of these brackets is located at or near one side edge of the tablet A and the other bracket at or near the other side edge of the said tablet. Both brackets are beneath the tablet. The end of each bracket is provided with an opening E', constituting the bearing for the journal of the roller H, carrying the roll P of paper. Entrance to the journal-bearing E' is provided by the opening E², whose direction varies to suit the position of the roll of paper R. (Illustrated in Figs. 3 and 4.) The roller or axis H, which is to support the paper roll at each end, terminates preferably in the diminished portion forming a journal.

In adjusting the paper and roller H into position the roller H is first passed through the central opening present in the paper rolls of this character, and the paper roll is then passed between the brackets E E, and each journal of the said roller is introduced into its respective adjacent bearing E' through the adjacent slot E². The end of the roller being larger than the opening E' of the bearing, and the roller proper being between the brackets E E, the brackets will prevent the roller from slipping longitudinally out of the paper roll. The weight of the paper roll and

the roller H serve to keep the journal H' of the roller in position in their respective bearings.

For the purpose of preventing the paper roll from unwinding too rapidly from the roller a brake is employed, of any suitable description, one form of which is shown in the drawings, and consists of a rod F², provided at each end with an arm F. The upper free end of each of the arms F is pivoted at F' in its adjacent bracket E. Thus the brake-rod F² is free to oscillate on its pivots at F'.

The spring to press the rod F² against the roll of paper R consists of an elastic rod G, made of spring metal and wound once around the pivotal rod F', one end of the spring bearing against the tablet and the other end of said spring being wound around its adjacent arm F of the brake F². The tendency of each of these springs at each end of the brake is to press the brake F² against the paper, the arms of each of the springs continually endeavoring to separate, thus transmitting their pressure to the brake F². The upper end A² of the preferred form of tablet is rounded, so that paper drawn from the roll may pass up and around said end and down upon the tablet without undue friction.

Each upper corner of the tablet is provided with an extension-piece A', and between these extensions and secured thereto extends a rod D, the rod D being at a sufficient distance from the rounded end A² of the tablet to allow the paper to pass between the said rod D and the said end A² of the tablet. The rod D prevents the paper from buckling away from the end A² of the tablet and assists in keeping it in position between the extensions A' A' of the tablet.

On the top of the tablet and near its upper end is the cutter-bar C, the upper edge of this bar being provided with a cutting edge or blade. This cutter-bar also serves as a guide for the paper which passes between its lower surface and the upper surface. This cutter-arm and guide-rod is secured at each end of the tablet, and between said guide-rod C and the upper surface of the tablet there is a slight space left, sufficient to allow the thickness of paper from the roll R to readily pass. The rod C is quite near to the tablet and keeps the paper beneath it close down to the tablet. At the lower end of the tablet is a cross-bar B, secured at each end to the tablet, and, like the rod C, raised just far enough to allow a single thickness of the roll to pass without undue friction, and at the same time holds the sheet of paper against the upper surface of the tablet. The lower edge is angular, preferably sharp, and operates as a knife.

One of the two modes in which my tablet is utilized is as follows: The journal H is passed into the center of the roll R of paper, and the ends of the journal are respectively passed through the adjacent opening E² of the bracket and lodged in their adjacent bearing E'.

The free end of the paper is then drawn out and up over the front end of the tablet under the lower cutter-bar B, and thence over the tablet to the cutter-bar C. The paper is then passed under the latter, as shown in the drawings. The message is then written on that portion of the paper which lies upon the tablet and between the cutter-bars C and B. When this portion of the paper is filled with writing, the paper is pushed upward over the tablet and under the cutter C until the completion of the message or of the other matter to be written thereon. The paper is pushed or drawn forward and upward till the end of the message, &c., is beyond the upper cutter-bar C. The paper is then at one edge lifted and cut off by cutter C.

It becomes desirable in many instances to have the paper pass in a contrary direction over the tablet from that illustrated in the drawings. In such event the roll R of paper and its roller H are together withdrawn from the bearings E'. The position of the roll and roller are now preferably reversed, end for end, in relation to the bearings E. The roll R will then deliver its paper from the lower side toward the upper or rear end of the tablet. The free end of the paper of the roll is now carried up and over the rear rounded end of the tablet and between the said end and the rod D. The end of the paper is next carried down upon the upper surface of the tablet, first under the guide and cutter rod C and then under the guide and knife bar B. The paper lying upon the upper surface of the tablet lies flat thereupon and is held firmly in position. It is now in readiness to receive any memorandum to be written thereon by the person at the telephone or speaking-tube, and as he receives the message from said telephone or tube the tablet affords him a convenient opportunity for writing down what he hears, the tablet holding the paper firmly in position and allowing the operator the entire use of his hand for writing down the message upon the paper on the tablet. After the message has been received and written down, the operator draws down that portion of the paper containing the message until it has passed below the knife-bar B. He then raises that portion of the paper below the knife-bar B and it is cut off by the latter. At the same time that he has thus drawn down and cut off that portion of paper containing the message a fresh portion of paper has appeared on the tablet in readiness for him to write down a second message which shall be received from the telephone or tube. In this way the tablet can be utilized for the reception of any number of successive messages by any one operator or by a number of parties in turn using the telephone or tube.

The clamp for attaching the tablet to the telephone battery-box will now be described. This clamp consists of two opposing companion pieces or jaws. Each of these pieces S is, in general, the counterpart of the other. Each

piece is provided at one end with a long jaw S' and at the other end with a short jaw S^2 . Each clamp-piece S is perforated, the perforation S^3 being vertical when the jaws are in the position shown in Fig. 2. The perforation is between the long jaw S' and the short jaw S^2 . Between these two jaws, and from the under side of the piece S , project two lugs S^4 , located, preferably, in a vertical plane transverse to the length of the jaws and lying to one side of the vertical axis of the perforation S^3 . The function of these lugs is as follows: They compel the opposing clamp-pieces to be correctly opposed to each other and properly united—viz., as shown in the drawings. Should the operator who is employed to put them together place the wrong ends of one clamp-piece opposite the end of the other, the lugs S^4 of the opposing pieces, when placed alongside of each other, will prevent the perforation S^3 of the one clamp-piece from coming opposite the perforation S^3 of the other clamp-piece. Another important advantage consists in the fact that these lugs prevent that edge of the top M of the battery-box which enters between the clamp-pieces A from reaching the thread of the screw S^3 and being abraded thereby. The lugs perform a similar office for that edge of the tablet which they embrace. The shoulder S^4 , while not absolutely necessary, co-operates with the opposing lugs S^4 in performing the functions of a stop for the adjacent edge of the tablet or top N introduced therein, and also, together with the lugs, contributes toward keeping the clamp-pieces steady.

The two lugs S^4 of a clamping-piece may, when desired, be joined at their vertical face. They are preferably obviously separate for the sake of economizing the weight and cost of the clamp.

The opposing clamp-pieces S are connected together by a screw or bolt, the preferred means being a screw S^6 . (Shown in dotted lines in Fig. 2.) To this end the upper end of the perforation S^3 of one of the clamp-pieces S is countersunk for the reception of the screw-head of said screw, and the perforation S^3 of the other clamp-piece S is provided with an interior screw-thread for engagement with the thread of the screw S^6 .

In applying the clamp the opposing jaws are placed as shown in Fig. 2. The short jaw S^2 of the lower clamp-piece S fits under the projecting edge of the top N of the battery (telephone) box, the free end of the jaw resting against the adjacent perpendicular side of the box M . The long jaw S' of the upper clamp-piece S rests upon the upper surface of the top of the battery-box N . The short jaw of this upper clamp-piece rests upon the upper adjacent surface of the tablet, and the long jaw S' of the lower clamp-piece rests upon the adjacent under surface of said tablet. The opposing clamp-pieces S are now approximated by the screw S^6 or equivalent

device. One set of the opposing jaws S' and S^2 at the battery-box is thereby caused to tightly embrace the top N of the said box, and the other set of opposing jaws S' and S^2 tightly embrace the adjacent portion of the tablet. Two pairs of these clamp-pieces S will ordinarily be employed—one to connect the tablet near its upper or rear portion with the upper adjacent portion of the battery-box and the other to connect the tablet near its lower or front part with the forward adjacent portion of the top N of the battery.

Either or both of the long jaws S' may be shortened; but the hold (or purchase) of said jaw so shortened will, in its relations to the parts shown in the drawings as clamped by the clamp-pieces, then be impaired. The jaw S^2 of the upper clamp, being short, is out of contact with the paper on the tablet, and the short jaw S^2 of the lower jaw utilizes the room between the edge of the top N and the adjacent vertical wall M of the battery-box. The long arm S' of the lower clamp by its length gives support to the tablet where most needed—viz., beneath the latter—and the long arm S' of the upper jaw presents a large amount of frictional surface, thereby the better enabling the clamp to securely grasp and hold fast the top of the battery-box.

While the various features of my invention are preferably employed together, one or more of said features may be employed without the remainder, and, in so far as applicable, one or more of said features may be employed in connection with tablets other than the one herein specifically specified.

What I claim as new and of my invention, and desire to secure by Letters Patent, is—

1. The combination of the tablet A , brackets, roller H , paper roll, and knife and guide-bar B , located upon the front portion of the knife, and guide-bar C , located on the upper portion of the tablet, substantially as and for the purposes specified.

2. The combination of the tablet A , carrying near its lower or front portion the guide and cutter bar B and at its upper or rear portion the guide and cutter bar C , and the supporting-brackets having slots E^2 , and the reversible roller H , substantially as and for the purposes specified.

3. In a clamp, the clamp-pieces, each having one long jaw S' and a short jaw S^2 , the long jaw of one clamp-piece being opposite the short jaw of the other clamp-piece, and vice versa, and means, substantially as described, for approximating the clamps, substantially as and for the purposes specified.

4. In a clamp, the clamp-pieces, each having two jaws, and the lugs S^4 , and means for approximating the said jaws, substantially as and for the purposes specified.

5. In a clamp, the clamp-pieces, each having two jaws, and lugs S^4 , and perforation S^3 , the abutment-face of the lug being to one side of the periphery of the screw or bolt passing

through said perforation and toward the jaws with which it is intended to co-operate, and the screw or bolt S⁶, substantially as and for the purposes specified.

5 6. In a clamp, the clamp-pieces, each having two jaws of unequal length, and lugs S⁴, located substantially as described, the long jaw of one clamping-piece being opposite the short jaw of the other clamping-piece, and
10 vice versa, each clamping-piece having a perforation S³ between the jaws, and a screw or bolt S⁶, located in said perforations, and lugs S⁴, whose abutment-face is forward of the periphery of the said screw or bolt and toward
15 the jaws with which it is to co-operate, substantially as and for the purposes specified.

7. The clamp consisting of the two clamp-pieces S S, each having two jaws and a perforation at the junction—viz., between the latter and a screw or bolt therein—and lugs S⁴,
20 fencing in the said screw or bolt from contact with the things to be grasped by the jaws, the long jaw of one clamp being opposite the short jaw of the opposing clamp and shoulder S⁵ of
25 each lug, whose working-face is in a plane with the working-face of the lug S⁴ of the opposing

jaw, substantially as and for the purposes specified.

8. The combination of the battery-box M of the telephone, having a projecting and separable adjustable writing-tablet, and the clamp whereof each clamp-piece has a long and a short jaw, the long jaw of the upper clamp pressing on the upper face of the battery-top N, and the short jaw thereof pressing on the adjacent edge of the tablet, the long jaw of the lower clamp-piece pressing up against the lower face of the tablet, and the short jaw of said lower clamp embracing the lower face of the edge of the top of the battery-box, the clamp-pieces being each provided between their respective jaws with a perforation receiving a clamping screw or bolt S⁶, and in the neighborhood of the junction of said jaws with lugs S⁴, which latter together fence in the screw or bolt, substantially as and for the purposes specified.

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Attest:

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