(No Model.) 2 Sheets—Sheet 1.

A. R. BIRCHARD.

STENOGRAPHER'S TABLET.

No. 424,534. Patented Apr. 1, 1890.

Fig. 1.

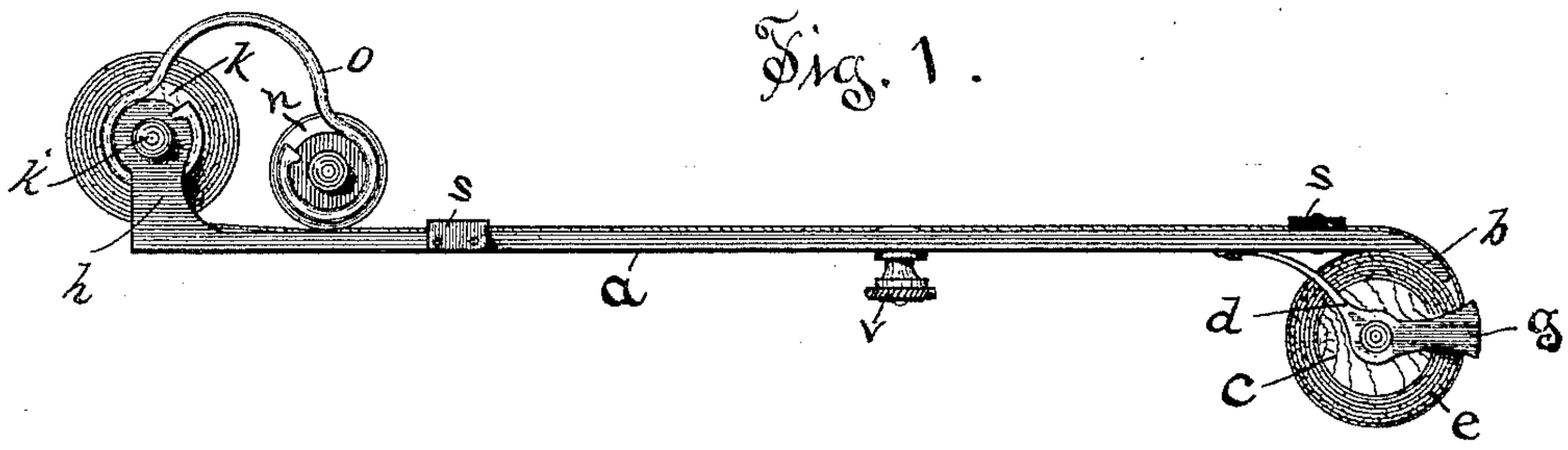


Fig. 2.

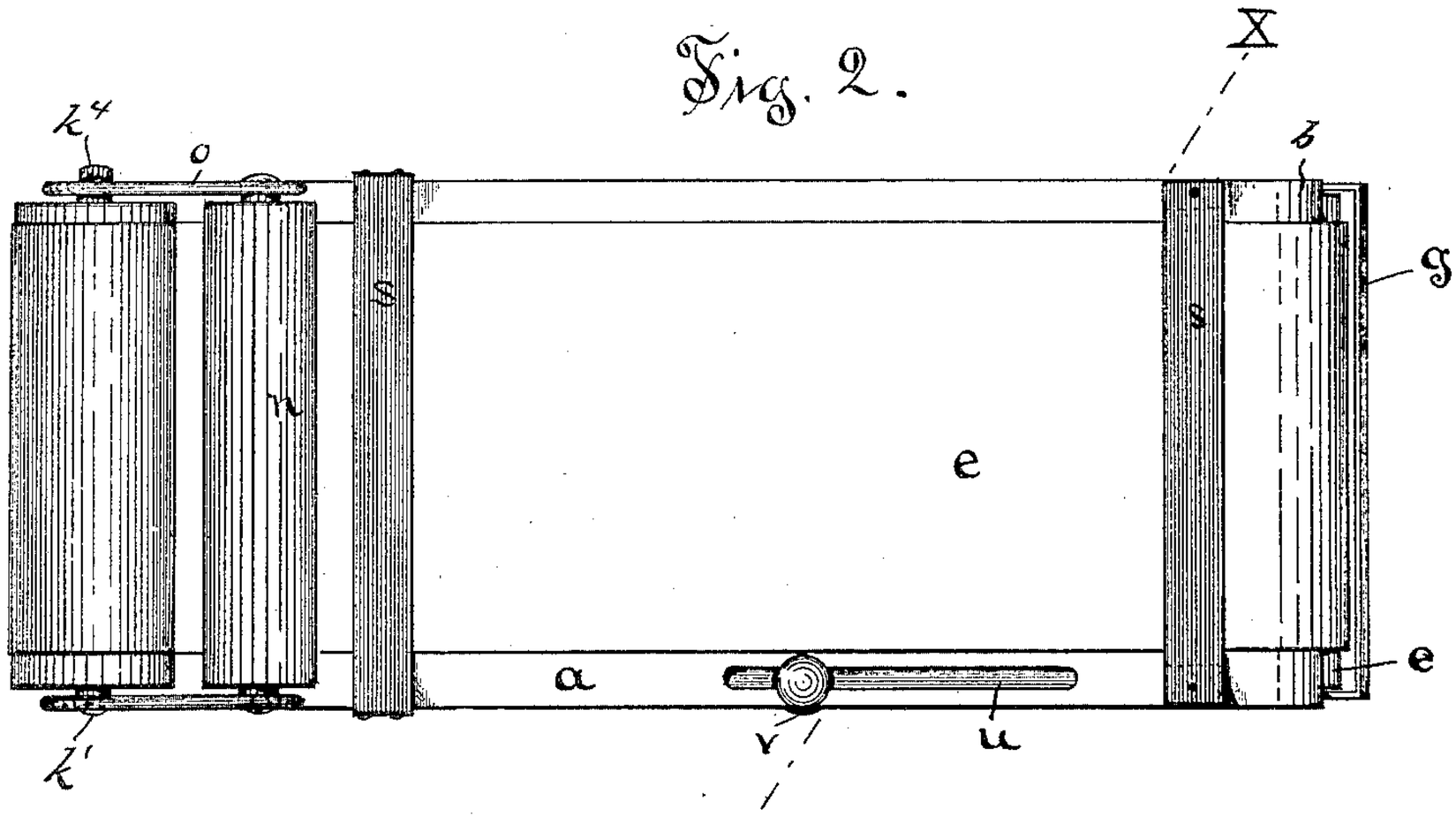
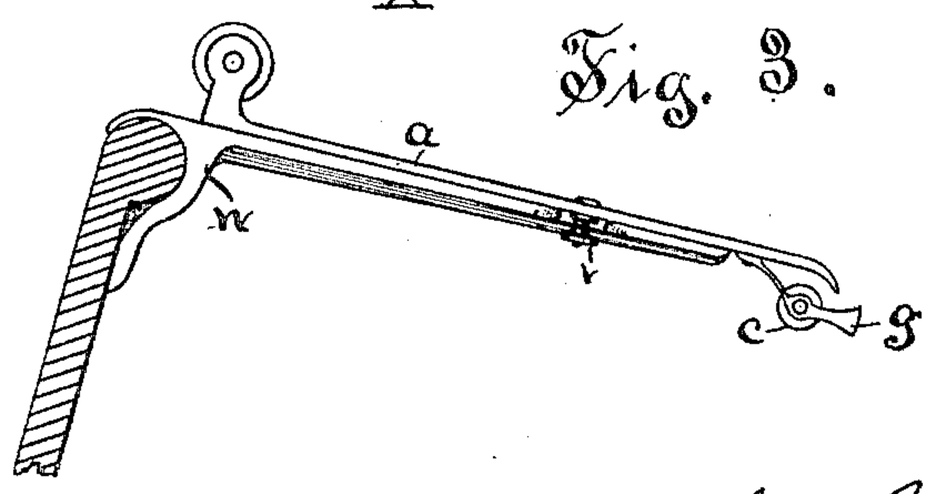


Fig. 3.



Witnesses

Allen Fenny.

Alonzo M. Luther.

Inventor

Arthur R. Birchard

By his Attorney

Frank H. Allen.

(No Model.) 2 Sheets—Sheet 2.

A. R. BIRCHARD.

STENOGRAPHER'S TABLET.

No. 424,534. Patented Apr. 1, 1890.

Fig. 4.

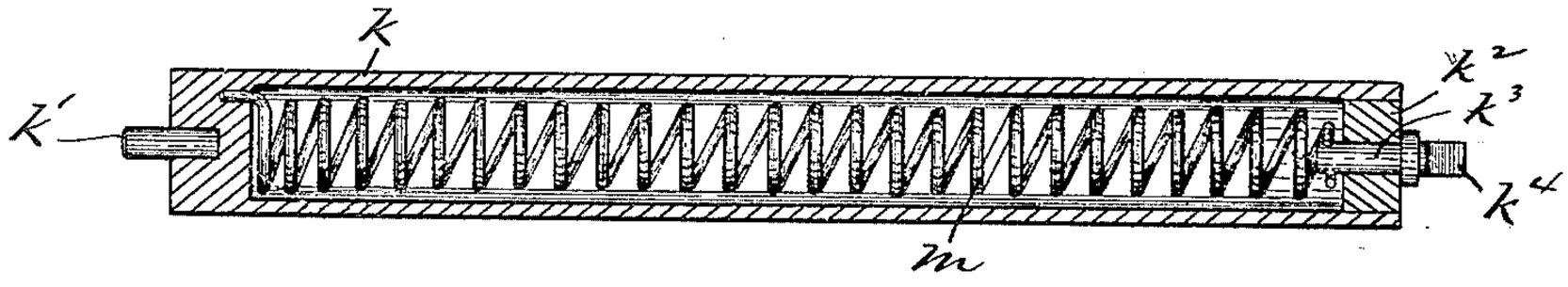
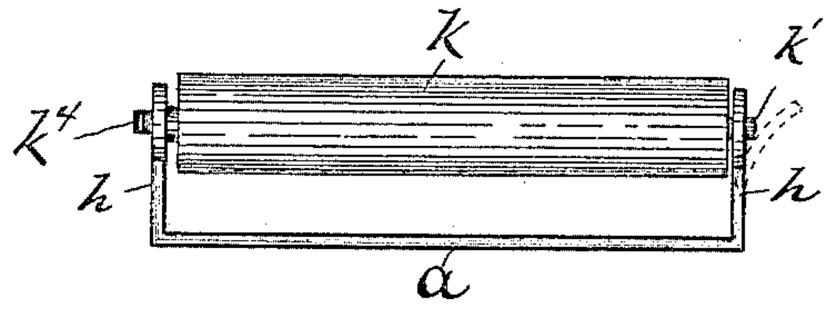


Fig. 5.



Witnesses
Allen Fenny
Alonzo M. Luther.

Inventor
Arthur R. Birchard
By his Attorney
Frank H. Allen.

UNITED STATES PATENT OFFICE.

ARTHUR R. BIRCHARD, OF NORWICH, CONNECTICUT.

STENOGRAPHER'S TABLET.

SPECIFICATION forming part of Letters Patent No. 424,534, dated April 1, 1890.

Application filed November 18, 1889. Serial No. 330,650. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR R. BIRCHARD, a citizen of the United States, residing at Norwich, in the county of New London and State of Connecticut, have invented certain new and useful Improvements in Stenographers' Tablets, which improvements are fully set forth and described in the following specification, reference being had to the accompanying two sheets of drawings, in which—

Figure 1 is a side elevation of a tablet of my improved construction, and Fig. 2 a top or plan view of the same. Fig. 3 illustrates a convenient attachment, by means of which a suitable support for such tablet is provided for use in churches and similar public places. Fig. 4 is an enlarged view in central longitudinal section of the spring feed-roll, which I preferably use; and Fig. 5 is a view of the plate or bed of my tablet, looking at the left-hand end of Fig. 1 and showing in place the said feed-roll.

My invention relates to tablets for stenographers' use, and has for its object the production of a device which may be used on an ordinary table, if desired, and in which the paper may be fed along and blotted automatically, thus leaving the operator free to attend to his writing.

Referring to the annexed drawings, the letter *a* indicates a plate of sheet metal, having one end curved downward, as at *b*, and having immediately beneath said curved end a roll *c*, which is hung in bearings *d*, formed also of sheet metal and adapted to serve as springs to press said roll *c* upward into engagement with the curved plate *b*. This roll *c* is provided to receive and support a roll of paper *e*, which is drawn off as needed, as hereinafter explained.

g denotes a plate which extends from one bearing *d* around the coil of paper to the companion bearing. The opposite end of the plate or bed *a* has upwardly-projecting portions *h*, that are perforated to provide bearings for a roll *k*, that is to receive and take up the paper after it has been written on. This roll *k* is shown in section in Fig. 4, and consists of a cylinder with a fixed journal *k'* in one end, the opposite end being closed by a plug or cap k^2, in which is loosely fitted a stud k^3, whose outer end is flattened, as at k^4. Within the cylindrical body of the roll is a spiral spring *m*, one of whose ends is fixed in stud k^3, the other end being made fast to the cylinder end. The perforation in one of the projections *h* is round and of a size to receive the round journal *k'*, while the perforation in the companion projection is square and of a size to receive the flattened end k^4 of the stud k^3. When the described roll is supported in its bearings and is rotated, stud k^3 is held against rotation by its square bearing, and the spring *m* is consequently rotated at one end and fixed at the opposite end, thus giving to said spring a torsional twist proportionate to the number of revolutions of the roll *k*, the general construction of the spring-roll thus provided being substantially the same as that of spring curtain-rolls now commonly used. Adjacent to roll *k* is a roll *n*, which is jacketed with blotting-paper and is supported in bearings that are preferably formed of or supported by spring-arms *o*, that may be attached to the main plate of bed *a*, or to the bearings *h*, that form the bearings of the roll *k*. The spring-arms *o* serve to force the blotter-roll down into close engagement with a strip of paper fed along on plate *a*. When about to use my improved tablet, the end of the coil of paper on roll *e* is carried upward around the curved end *b* of plate *a*, thence along said plate under the blotter-roll *n*, and is then attached to the take-up roll *k*, said roll having previously been rotated several times to give its spring *m* the desired torsional strain. Said roll *k* then seeks to draw the paper toward and around itself, but is prevented by the frictional contact of the paper on roll *c* with the under side of the curved plate *b*. When, however, the exposed surface of the paper has been written over, and it is desired to feed the paper along, the operator by leaning forward brings his body into contact with the plate *g*, already described, and by pressing slightly against said plate forces said roll *c* downward, thus releasing the roll of paper from contact with the curved plate, when the strip of paper may be drawn forward by the spring-roll *k*. By thus pressing against plate *g* the strip of paper may be caused to feed forward at the will of the operator, and as it feeds forward is drawn under the blotter-roll *n* and the surplus ink auto-

matically removed before said paper is taken up by the spring-roll.

s s in the drawings denote strips of metal reaching from side to side of plate *a*, and provided to serve both as guides to hold the paper in position as it is fed along and also as straight-edges, against which the paper may be torn off whenever it becomes necessary to remove a section.

It is frequently desired to use tablets of this class on a flat desk or table and to place said tablet on the table at an angle of sixty degrees (or thereabout) to the table-edge. In Fig. 2 I have indicated by dotted line *x x* such position of a table relative to a tablet.

Inasmuch as my method of controlling the feeding of the paper (by pressure of the body against plate *g*) requires that the tablet shall be held rigidly in a given position, I have provided in the edge of plate *a* a slot *u*, in which is a headed screw having a thumb-nut *v* on its lower end. This thumb-nut and screw may be adjusted and clamped anywhere within the limits of slot *u* and then screwed as a stop to abut the edge of the table, the opposite edge of the tablet being prevented from slipping forward on the table by the end of the bearing *d*, that supports the roll *c*.

When my described tablet is to be used in a church furnished with pews or settees, a convenient support may be provided by attaching a bracket *w* to the back of such pew or settee, as shown in Fig. 3.

The roll *k* may quickly be removed from the tablet proper by springing outward one of the bearings *h*, as shown in dotted lines in Fig. 5.

Tablets of my improved construction may be produced cheaply and have the further advantage of portability and lightness.

Having described my invention, I claim—

1. A tablet for stenographers' use, consisting of a bed-plate having at one end a spring-actuated take-up roll and at the opposite end a delivery-roll supported in yielding bearings, as set forth, and having its circumference in frictional contact with the said plate, as and for the objects specified.

2. In combination with a plate, a spring-acuated take-up roll journaled at one end of said plate, as set forth, a delivery-roll hung in yielding bearings at the opposite end of said plate, and a blotter-roll adjacent to said take-up roll in the path of the paper, as and for the purpose specified.

3. In combination with a plate forming the bed of a tablet, a take-up roll journaled at one end thereof, a delivery-roll journaled at the opposite end, with its circumference in frictional contact with said bed-plate, and an arm or plate extending from one journal-bearing of the said delivery-roll to the companion bearing, all substantially as and for the objects specified.

4. In a stenographer's tablet, in combination, a bed-plate, a take-up roll journaled at one end thereof, a blotter-roll adjacent to said take-up roll, as set forth, a delivery-roll at the opposite end of the said bed-plate, with its circumference in frictional contact with said bed-plate, and an arm or plate extending from one journal-bearing of said delivery-roll to the companion bearing thereof, as described, and for the objects specified.

5. In a stenographer's tablet, in combination, a bed-plate having at one side a longitudinal slot, with a stop-screw adjustably seated therein, as set forth, a take-up roll journaled at one end of said bed-plate, and a delivery-roll journaled at the opposite end of said plate, with its circumference in frictional contact therewith, substantially as and for the objects specified.

6. In combination with a bed-plate, a spring-actuated take-up roll journaled at one end of said plate, a delivery-roll at the opposite end of said plate, and a straight-edge, as *s*, extending from side to side of said plate between the take-up and delivery rolls, substantially as and for the purpose specified.

7. In combination with a bed-plate, a spring-actuated take-up roll journaled at one end of said plate, a delivery-roll supported in yielding bearings at the opposite end of said bed-plate, with its circumference in frictional contact therewith, a blotter-roll adjacent to said take-up roll in the path of the written strip of paper, as set forth, and a straight-edge extending from side to side of said bed-plate between the take-up and delivery rolls, substantially as and for the objects specified.

8. In combination with a bed-plate having a longitudinal slot near one side, an adjustable stop-screw seated in said slot, as set forth, a take-up roll journaled at one end of said bed-plate, a delivery-roll journaled at the opposite end of said plate, a blotter-roll adjacent to said take-up roll, and a straight-edge extending from side to side of said plate between the take-up and delivery-rolls, all substantially as and for the objects specified.

ARTHUR R. BIRCHARD.

Witnesses:
FRANK H. ALLEN,
ALONZO M. LUTHER.