

No. 721,386.

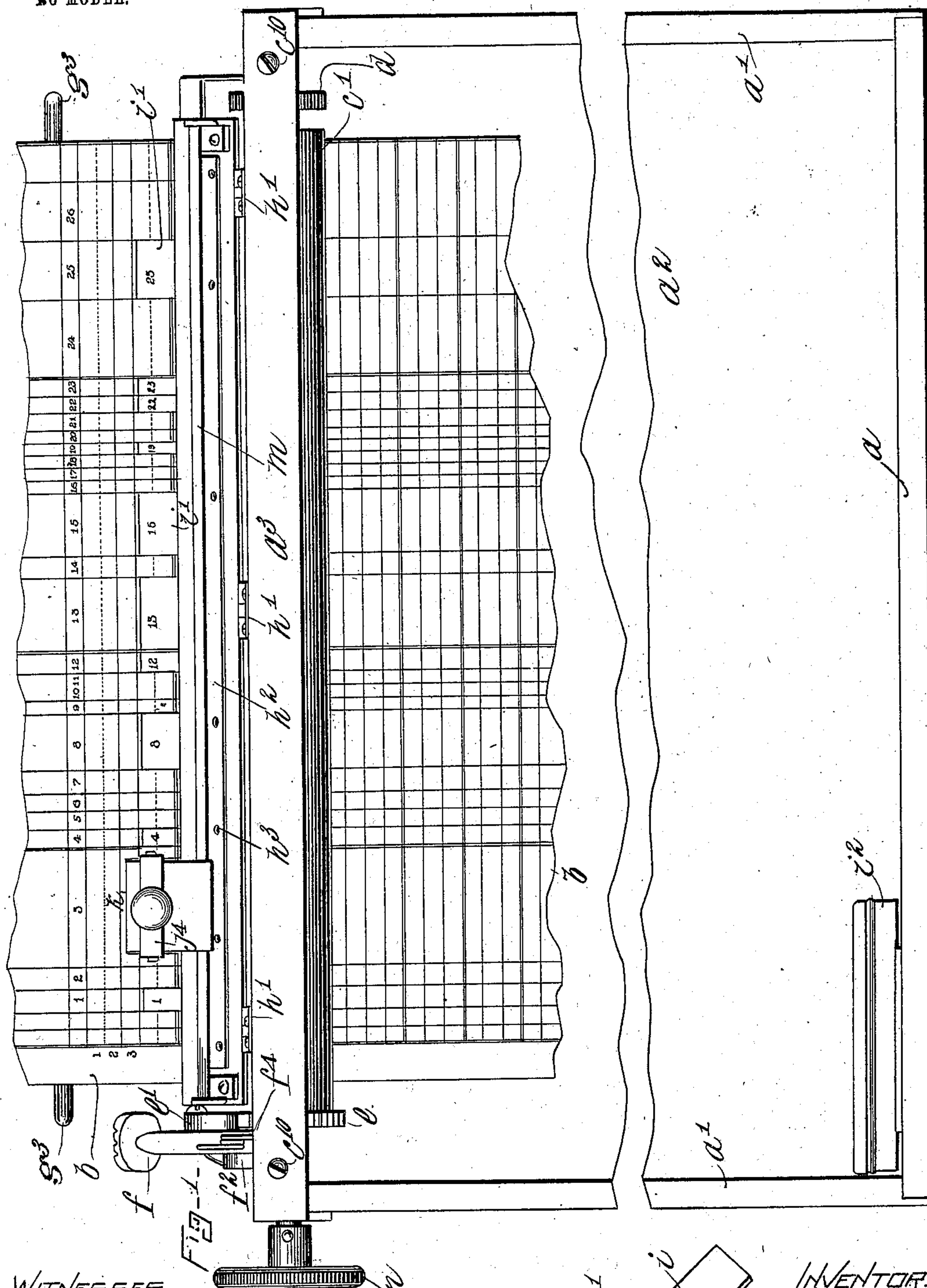
PATENTED FEB. 24, 1903.

C. F. PIDGIN.  
SCHEDULE HOLDER.

APPLICATION FILED JUNE 22, 1899.

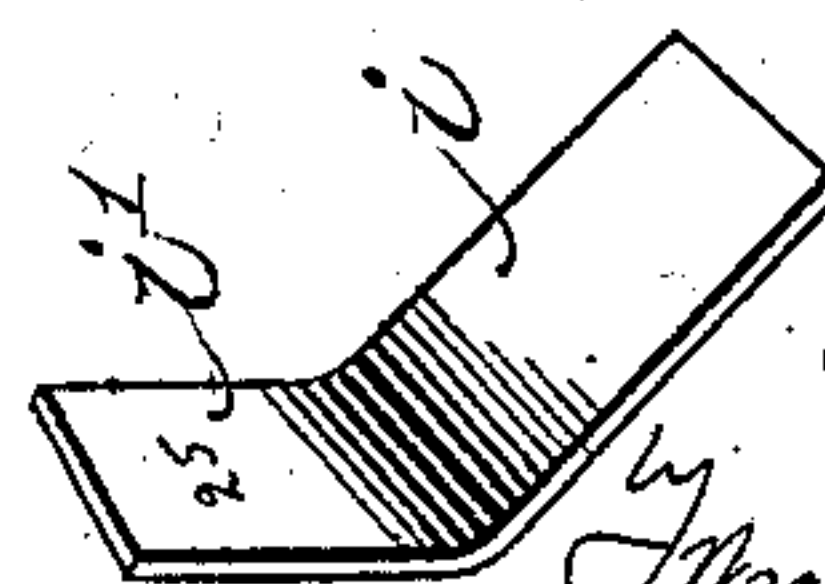
NO MODEL.

2 SHEETS—SHEET 1.



WITNESSES.  
C. C. Stecher  
H. L. Robbins.

FIG-5-



INVENTOR.  
Charles F. Pidgin  
By Wright, Brown & Smith  
Attys.

No. 721,386.

PATENTED FEB. 24, 1903.

C. F. PIDGIN.  
SCHEDULE HOLDER.

APPLICATION FILED JUNE 22, 1899.

NO MODEL.

2 SHEETS—SHEET 2.

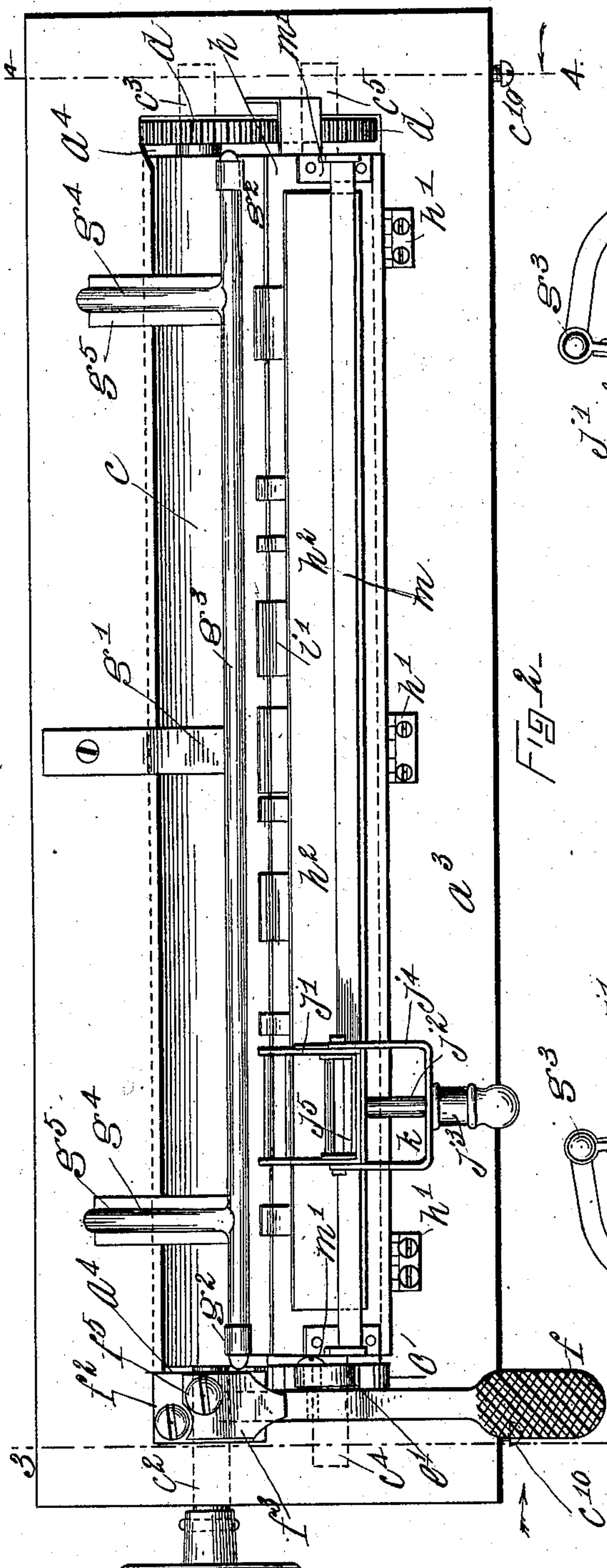


FIG. 1.

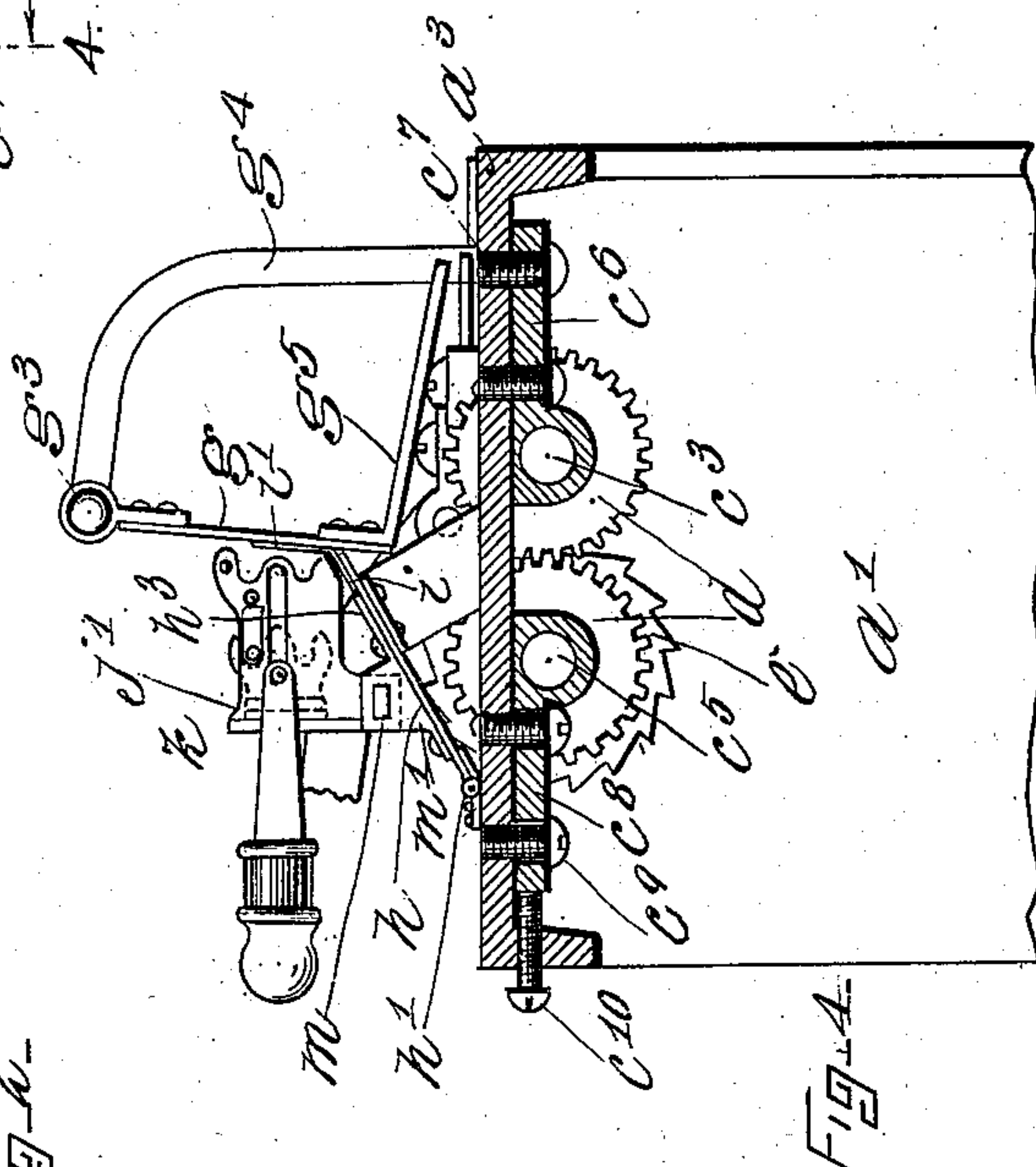


FIG. 2.

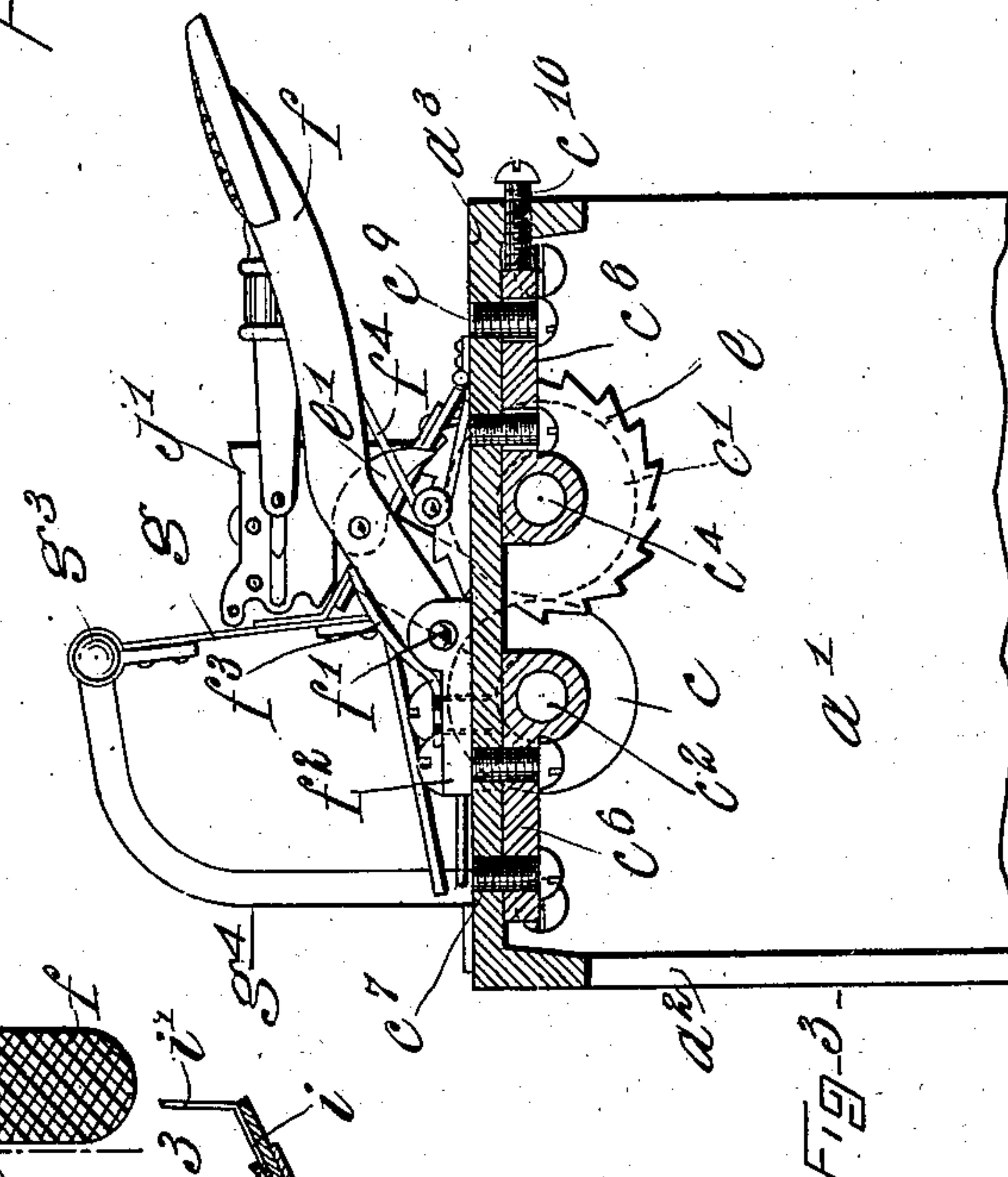


FIG. 3.

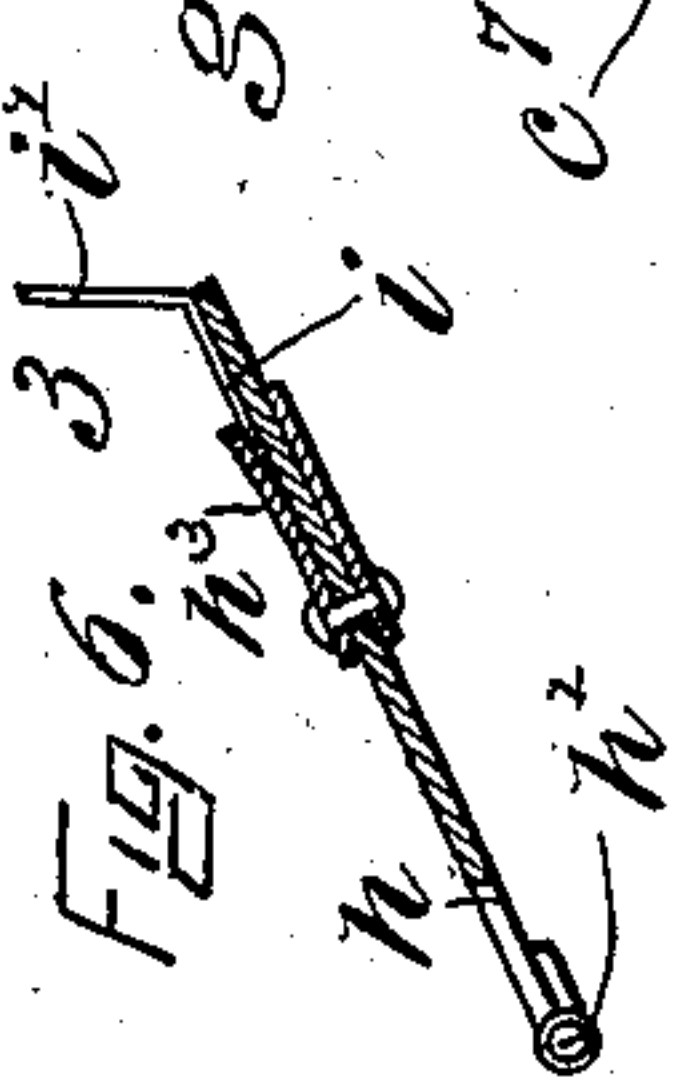


FIG. 4.

WITNESSES:  
C. C. Stecher.  
H. L. Robbins.

INVENTOR:  
Charles F. Pidgin  
By Wright, Brown & Lundy  
Attys.



# UNITED STATES PATENT OFFICE.

CHARLES F. PIDGIN, OF BOSTON, MASSACHUSETTS.

## SCHEDULE-HOLDER.

SPECIFICATION forming part of Letters Patent No. 721,386, dated February 24, 1903.

Application filed June 22, 1899. Serial No. 721,484. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES F. PIDGIN, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Schedule-Holders, of which the following is a specification.

This invention has for its object to provide a copy or schedule holder for use in the tabulation of statistical and other items.

10 In transferring items from a printed or written schedule in which they are arranged in rows, both longitudinally and vertically of the sheet, it is of great assistance to the tabulator or operator to have the schedule-  
15 holder so constructed and arranged that only those items which are to be transferred or copied are exposed to view. For instance, if a schedule contains in vertical columns facts or items relating to the sex, color, place of  
20 nativity, conjugal condition, and the age period of an individual, together with relation to head of family, occupation, number of months in the year during which he is employed, his degree of illiteracy, and his  
25 length of residence in a town or city, and the tabulator wishes to transfer or record only a certain number of those items relating to each person by covering the columns in which the items which are not to be transferred or  
30 recorded occur, those which are to be transferred or recorded are left visible and may be seen at a glance, and attention is not drawn to the other parts of a line of items, the reading of which is unnecessary.

35 This invention consists of a schedule-holder having provisions for receiving and feeding a wide schedule or sheet and provided with means for obscuring or rendering invisible those columns of items which it is unnecessary to transfer or record; and it also consists  
40 of a schedule-holder having certain features of construction and relative arrangement of parts, all as I have illustrated upon the drawings, described in the following specification, and particularized in the appended claims.

Referring to the drawings which form a part of this specification and on which similar reference characters indicate similar parts or features, as the case may be, wherever  
50 they occur, Figure 1 represents in front elevation a schedule-holder embodying my invention. Fig. 2 represents a plan view of

the same. Fig. 3 represents a section on the line 3 3 of Fig. 2 looking in the direction of the arrow. Fig. 4 represents a similar section on the line 4 4 of Fig. 2 looking in the direction of the arrow. Fig. 5 represents in perspective view one of the obscuring slips or devices by means of which a column of items on a schedule is rendered invisible to  
60 the tabulator. Fig. 6 is a detail.

Referring to the drawings, which portray one embodiment of the invention, there is shown a frame which is box-like in form, the same comprising a bottom  $a$ , end standards  $a'$ , a back  $a^2$ , and a top or table  $a^3$ , all suitably connected together by suitable fastening devices. The particular formation of the frame is of course immaterial save in so far as it is adapted to permit the passage  
70 through the top plate or table of a schedule or other sheet of paper containing in columns and transverse rows a series of numbers, symbols, or other characters representing statistical or other items.

One form of schedule which may be passed through the machine is shown in Fig. 1 as consisting of a sheet  $b$  of paper having a plurality of longitudinal columns separated by divisional lines and numbered from 1 to 26.  
80 The sheet is likewise transversely divided by lines, the spaces between the lines being numbered, if desired. Where this schedule forms a part of census or other similar records, all of the items extending across the  
85 paper in a transverse line may relate to a single individual, said items being divided by the parallel longitudinal lines, and the characters marked upon said lines may indicate the sex of an individual, his eligibility  
90 as a voter, his color or race, his conjugal condition, &c. This sheet may be coiled within the box or frame and is fed upward through an aperture in the table between feed-rolls  
95  $c$   $c'$ , which are preferably shod with rubber or other suitable substance capable of frictionally engaging the schedule. Each roll is provided with trunnions, those for the roll  $c$  being indicated in dotted lines in Fig. 2 as  
100  $c^2$   $c^3$ , while those for the roll  $c'$  are indicated in the same figure as  $c^4$   $c^5$ . The trunnions  $c^2$   $c^3$  are journaled in brackets  $c^6$ , which are secured by screws  $c^7$  to the under side of the table  $a^3$ , and those indicated at  $c^4$   $c^5$  are jour-



naled in similar brackets  $c^8$ , fastened by screws  $c^9$  in a similar way; but the apertures in the brackets  $c^8$ , through which the screws  $c^9$  pass, are elongated so that said brackets may be adjusted by screws  $c^{10}$  to move the roll  $c'$  relatively to the roll  $c$ . These rolls are located in the aperture  $a^4$  in the table  $a^3$ , and they are geared together by gear-wheels  $d$ , rigidly secured to the trunnions  $c^3$   $c^5$ , so that when one of the rolls is rotated the other is rotated in the opposite direction. A ratchet  $e$  is rigidly secured to the trunnion  $c^4$  of the roll  $c'$ , and a pawl  $e'$  for engaging the said ratchet and imparting a step-by-step movement thereto is pivoted loosely upon a lever  $f$ , which is fulcrumed upon a stud  $f'$  in a bracket  $f^2$ , secured to the top of the table  $a^3$ . The lever is held in a raised position against a stop  $f^3$  by a spring  $f^4$ , as best shown in Fig. 3, and when said lever is depressed the pawl  $e'$  engages the ratchet  $e$  and moves said ratchet forward one step to cause the rotation of the feeding-rolls  $c$   $c'$  to feed a schedule upward between them, so that it will be visible above the table  $a^3$ . The stop  $f^3$ , as shown in Fig. 2, consists of a bent strip of metal projecting forwardly to limit the upward movement of the lever and is secured by a screw  $f^5$  to the bracket  $f^2$ . The forward end of the lever  $f$  is swelled somewhat to form a key, which may be manipulated by the hand of the tabulator, and it is roughened on its upper surface, as shown in Fig. 2. As the schedule rises between the feeding-rolls it is guided by a backing-plate  $g$ , which is arranged transversely of the machine and parallel to the rolls and is located substantially tangentially to the rolls, as shown in Figs. 3 and 4. Midway between its ends its lower portion is secured to a brace  $g'$ , which in turn is secured by a screw to the table, and at its ends it is formed with clips  $g^2$   $g^2$ , which are secured to a rod  $g^3$ , formed on or secured to curved struts  $g^4$   $g^4$ . (See Figs. 2, 3, and 4.) Additional braces  $g^5$  are secured to the ends of said backing-plate at its lower edge, and their rear ends bear against the struts  $g^4$ , so that said plate is held stationarily to form a platen for the schedule when the marking device is thrust against it.

In order to hold a schedule against the backing-plate and also to cover up all of the lower portion of the schedule below the line which it is desired to read, I employ a gage consisting of a strip of metal  $h$ , which is hinged at  $h'$   $h'$  to the top of the table and is inclined, as shown particularly in Fig. 4. The upper edge of the gage comes directly upon one of the transverse lines in the schedule, so as to guide the gaze of the tabulator thereto. A smaller strip  $h^2$  of metal is secured by screws or rivets  $h^3$  along its outer edge to the upper face of the metallic strip  $h$ , and it extends substantially the entire width of the schedule. This strip of metal forms a spring member or clip, and between its free edge and the gage  $h$  may be secured the obscuring devices to

which I have previously referred. (See Fig. 6.) Said devices each comprise a small piece or slip  $i$  of metal, as shown in Fig. 5, which is bent between its ends, so that it will conform to the angle formed by the backing-plate  $g$  and the gage  $h$ , as shown in Fig. 4. The bent portion  $i'$  lies against the schedule, as shown in Fig. 1, and it covers a portion of the line of items, which is directly above the free edge of the metallic strip  $h$ . These obscuring devices  $i$  vary in width to conform to the width of the columns which they are designed to cover, and they are kept in a suitable box or receptacle  $i^2$ , located within the frame, as shown in Fig. 1. As shown, these obscuring devices cover columns 1, 4, 8, 12, 13, 15, 19, 22, 23, and 25, so that the tabulator tabulates or transfers these items in the lines which are uncovered, so that she is not compelled to distinguish between the various columns in selecting the items for transfer or tabulation. When the tabulation of one particular group of items is completed, the obscuring devices may be replaced by others to cover other columns and a second group transferred or tabulated until all of the items in the various columns have been taken off.

I have found it of great advantage to indicate upon the schedule each group of items transferred or tabulated and arrange for this being done by a marking device connected to the schedule-holder and movable transversely of the schedule. The marking device consists of a stamp (indicated generally at  $k$ ) and may be any one of the well-known devices now employed for such purposes. As shown, it consists of a U-shaped frame  $j'$ , having a forwardly-projecting rod  $j^2$ , on which a handle  $j^3$  slides. The handle is connected by a U-shaped strip  $j^4$  with a type-bar  $j^5$ , which normally rests against a printing-pad secured in the frame  $j'$ . By suitable devices which are well known in the art the type-bar is given a half-turn when the handle  $j^3$  is pressed inward to bring the type against the schedule. The frame  $j'$  is provided with a guide to receive an angular rod  $m$ , secured at its ends in brackets  $m'$ , attached to the metallic strip  $h$ . Consequently the stamping device may be moved from edge to edge of the schedule and is held in operative position to permit of the stamping or marking of any one of the columns thereon. Each item may be marked as it is tabulated or transferred, or each group of items may be checked by stamping a certain column, or else each column of items or characters may be checked as it is completed, showing that the work has been accomplished.

From this description it will be seen that I have provided a schedule-holder which is of the greatest aid and assistance when tabulating, transferring, or tallying items, numbers, or characters from a printed or written schedule. The work or schedule is held upright in front of the operator, and it is advanced step by step as occasion requires by depress-



ing the key or lever *f*. As the sheet is raised it bends backward by gravity over the rod *g*<sup>3</sup>, and thence behind the main frame. For the purpose of feeding in the sheet or schedule 5 between the rollers the trunnion *c*<sup>3</sup> of the roll *c* is projected beyond the side of the frame and is formed with a hand-wheel *n*, as shown in Figs. 1 and 2, and by turning said wheel both rolls may be rotated, and in case it be desired to reverse the movement of the sheet 10 the pawl *e'* may be lifted from engagement with the ratchet to permit a reverse rotation of the rolls. The sheet is guided upward after it leaves the rolls by the inclined strip *h*<sup>2</sup> 15 and the backing-plate *g*, which are assisted by the obscuring devices or slips *i*, and when the stamping or marking device is pressed against the sheet the plate *g* forms a platen to resist its thrust.

20 Where a schedule is too wide for insertion in the holder, the strip or gage may be removed and used separately, in which case it will be laid directly upon the schedule (with the obscuring devices arranged to cover the 25 columns not being transferred or added) and moved downward line by line. The slips may be bent to have their free ends rest on the schedule.

Having thus explained the nature of the invention and described a way of constructing and using the same, although without attempting to set forth all of the forms in which it may be made or all of the modes of its use, I declare that what I claim is—

35 1. A device of the character specified, comprising devices for longitudinally feeding a schedule or sheet, a gage arranged transversely of the path of movement of said schedule or sheet, and obstructing devices 40 supported adjustably on said gage for covering one or more portions of the schedule disclosed thereby.

2. A device of the character specified, comprising devices for longitudinally feeding a 45 schedule or sheet, a gage arranged transversely of the path of movement of said schedule or sheet, and devices carried by said gage for covering one or more portions of the

schedule, said devices being independently detachable. 50

3. A device of the character specified, comprising devices for feeding a schedule or sheet, a gage, and metallic slips adjustably connected to said gage for covering predetermined portions of the gage, said slips being 55 independently adjustable.

4. A device of the character specified, comprising devices for feeding a schedule or sheet, a gage having a spring member attached thereto, and one or more slips detachably secured to the gage by said spring member and 60 adapted to cover predetermined portions of the schedule.

5. A schedule-holder comprising feeding-rolls, means for imparting a step-by-step 65 movement to said rolls, a hinged gage in front of said rolls, having its free edge movable toward and from the rolls, and independently-adjustable obscuring devices carried by said gage. 70

6. A schedule-holder comprising feeding-rolls, means for rotating said rolls, a backing-plate above said rolls, a gage coacting with said plate for guiding the schedule after it 75 leaves the roll, and independent obscuring-slips supported by said gage.

7. A schedule-holder comprising a frame adapted to receive a schedule, means for feeding the schedule, a backing-plate, arms or struts arranged to support the top of said 80 backing-plate, braces interposed between said arms or struts and said backing-plate, a gage arranged to press the schedule against said backing-plate, and mechanism for advancing the schedule past the gage. 85

8. A gage consisting of an elongated member, and a plurality of obscuring devices detachably secured to said member and longitudinally adjustable relatively thereto.

In testimony whereof I have affixed my signature in presence of two witnesses. 90

CHARLES F. PIDGIN.

Witnesses:

MARCUS B. MAY,  
C. C. STECHER.