

(No Model.)

2 Sheets—Sheet 1.

W. J. ARNEY.

DEVICE FOR FACILITATING HANDLING MANUSCRIPT, &c.

No. 533,039.

Patented Jan. 29, 1895.

Fig. 1.

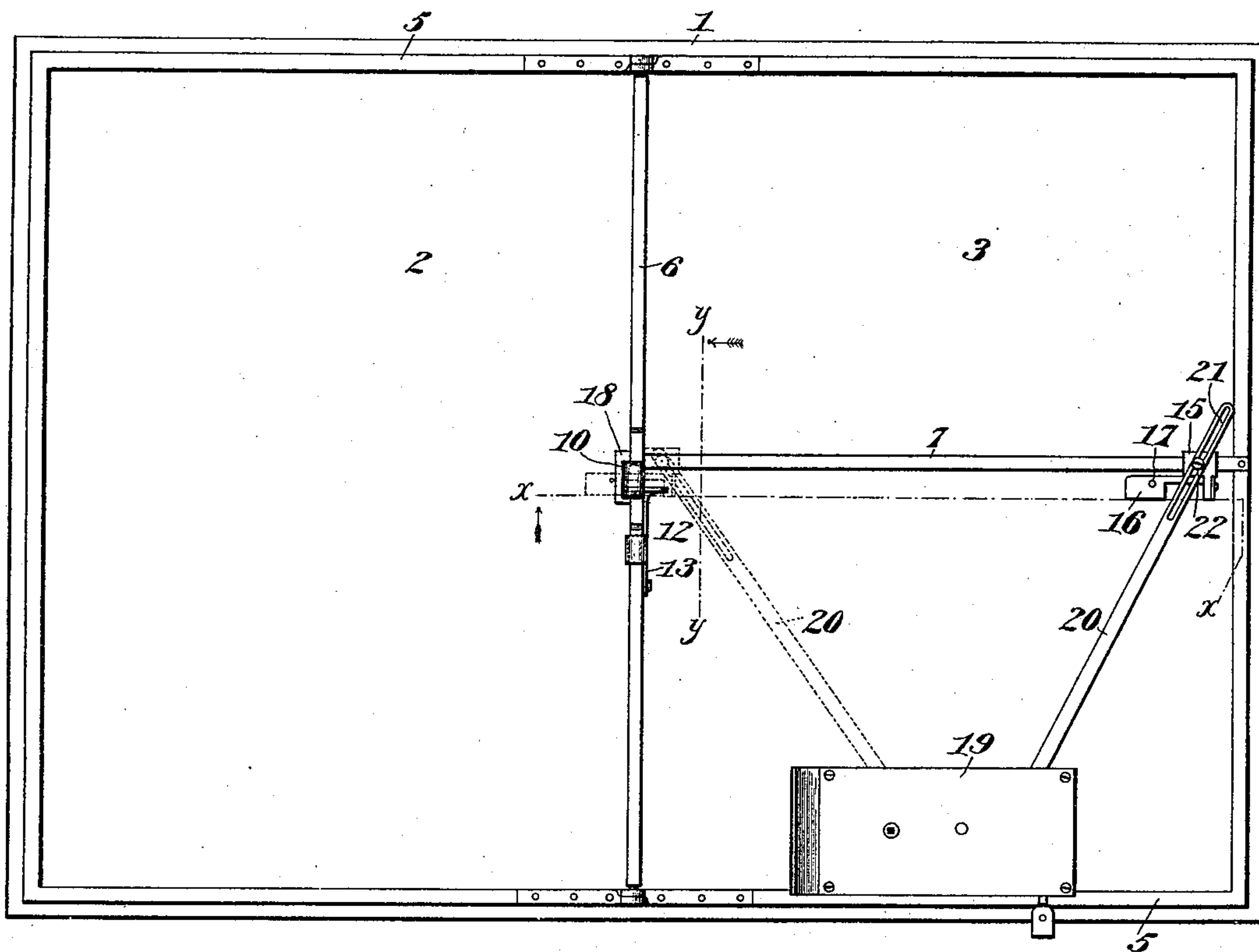


Fig. 2.

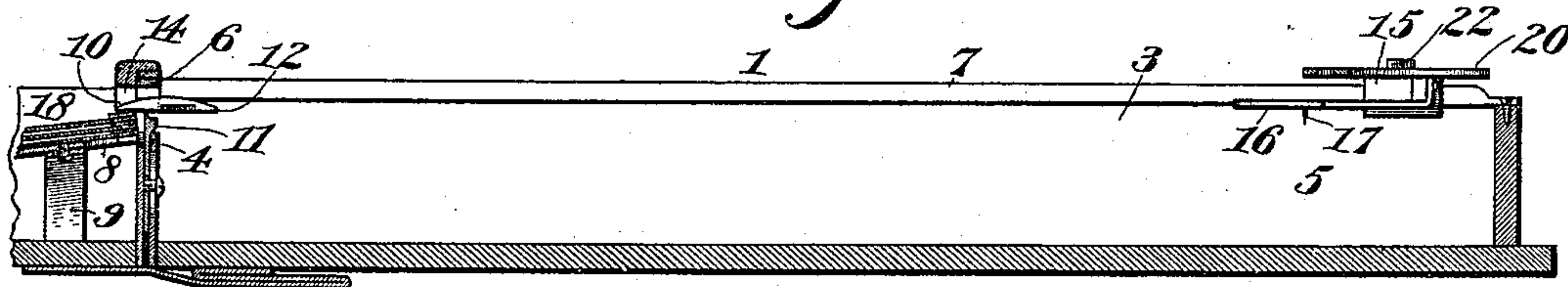
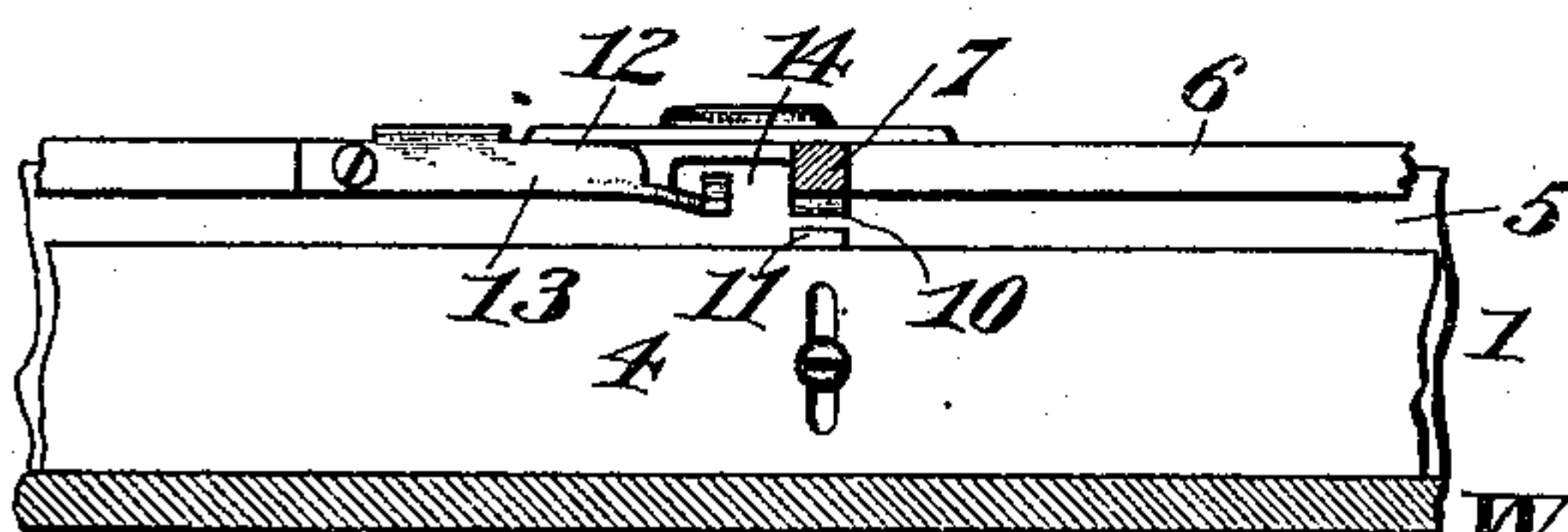


Fig. 3.



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(No Model.)

2 Sheets—Sheet 2.

W. J. ARNEY.

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Fig. 4.

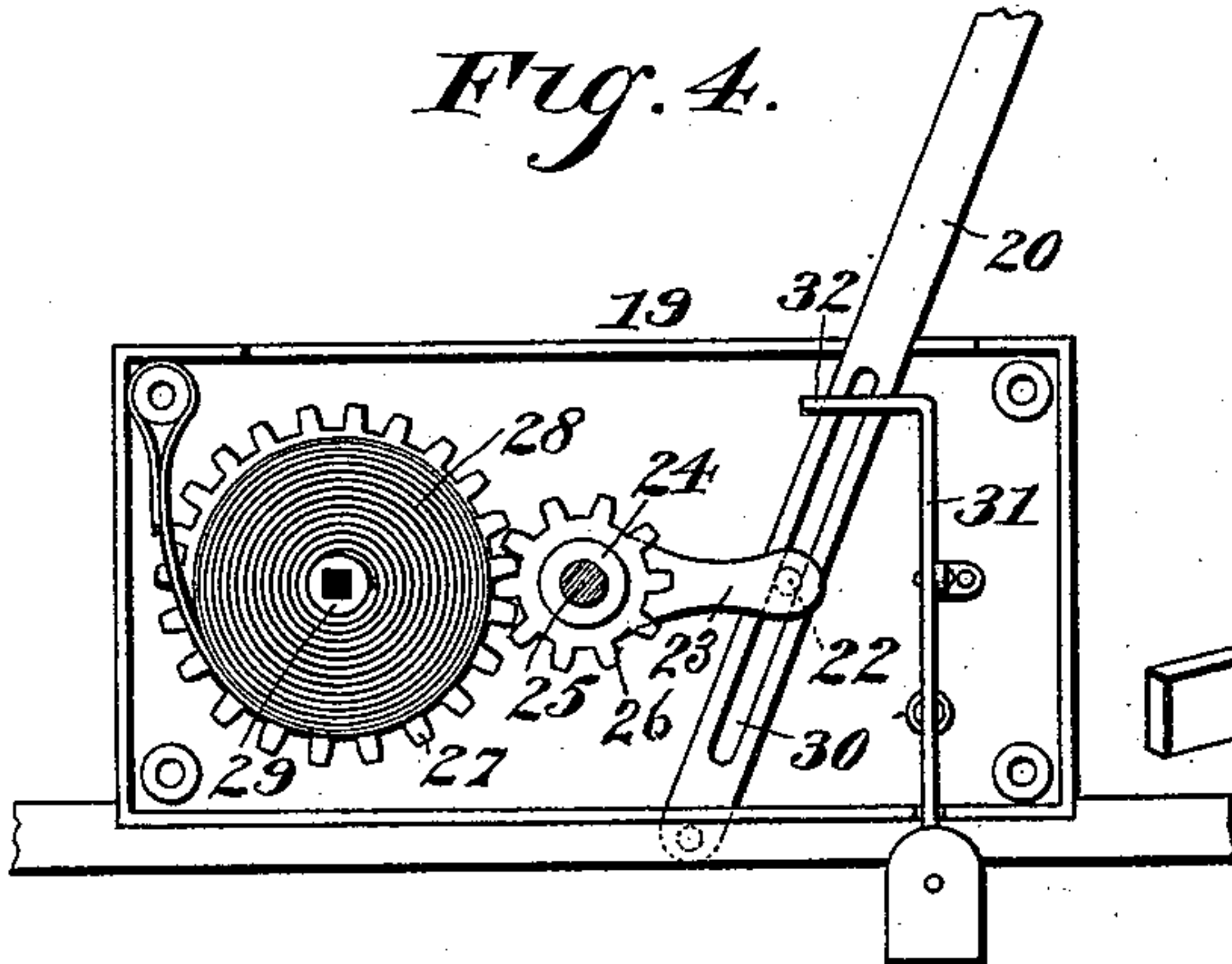


Fig. 5.

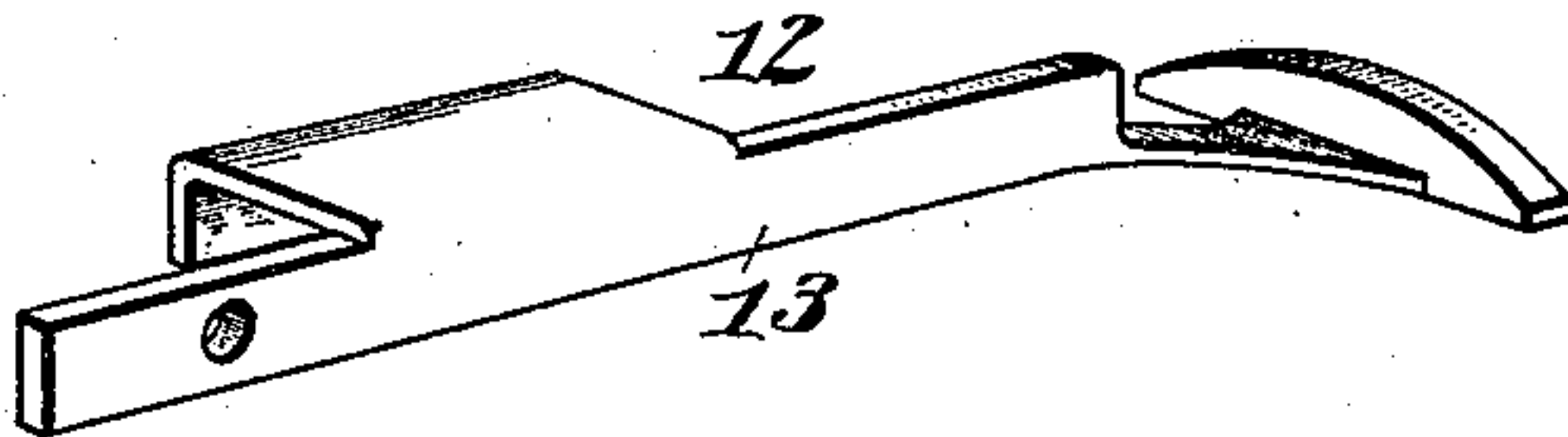


Fig. 6.

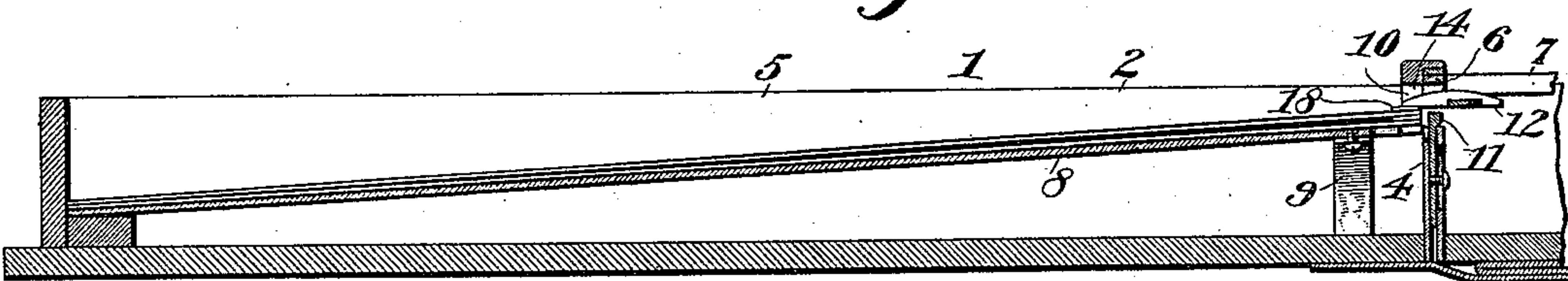
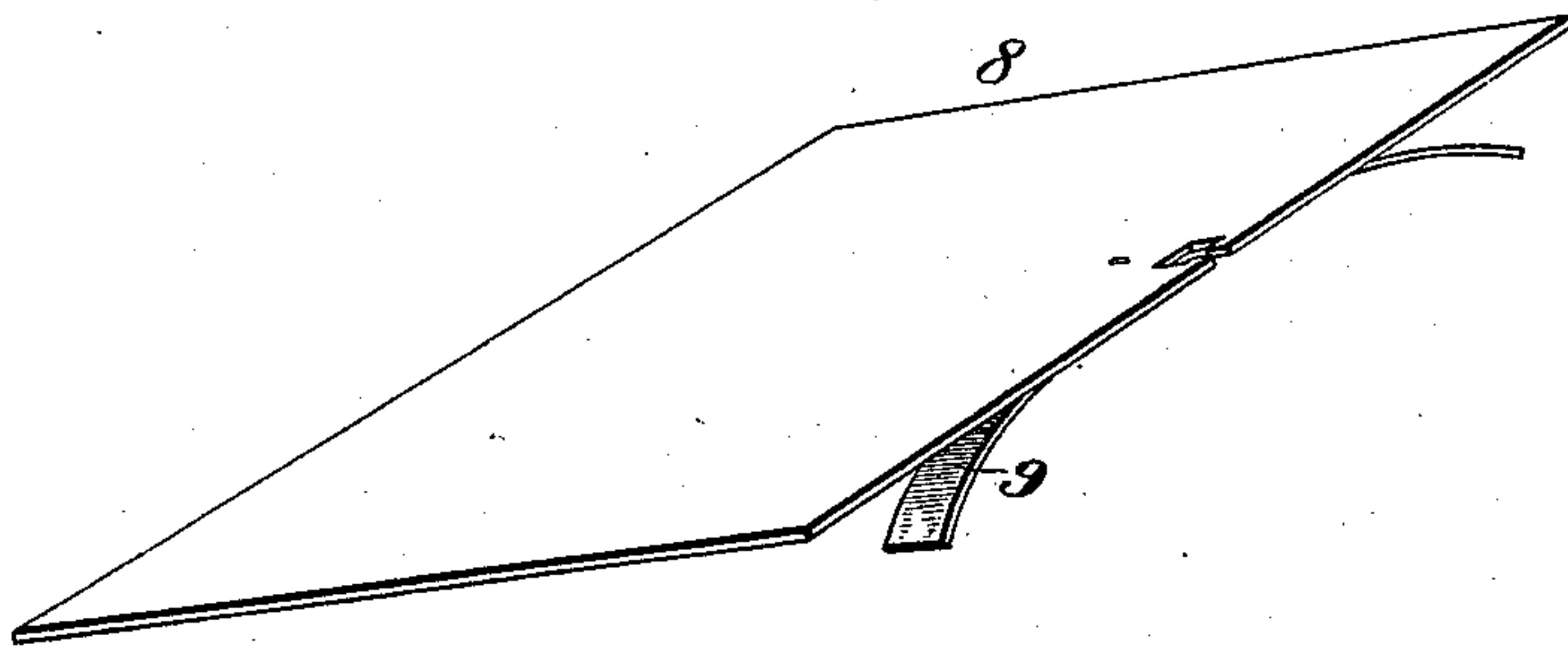


Fig. 7.



Witnesses;

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UNITED STATES PATENT OFFICE.

WILLIAM J. ARNEY, OF PORT ALLEGHANY, PENNSYLVANIA.

DEVICE FOR FACILITATING HANDLING MANUSCRIPT, &c.

SPECIFICATION forming part of Letters Patent No. 533,039, dated January 29, 1895.

Application filed December 19, 1893. Serial No. 494,040 (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. ARNEY, of Port Alleghany, in the county of McKean and State of Pennsylvania, have invented certain

5 new and useful Improvements in Devices for Facilitating the Handling of Manuscript and the Like, of which the following is a specification, reference being had to the accompanying drawings.

10 The object of my invention is to produce a simple and efficient device adapted to facilitate the handling of superimposed sheets of paper or the like, such for instance, as is ordinarily used for manuscript, sermons, lec-

15 tures, &c., whereby the sheets are successively exposed to view, removed and deposited in reverse order, but not in the reverse position.

Referring to the drawings: Figure 1 is a plan view of my device, showing the parts in position for use, and in dotted lines in position to remove the top sheet. Fig. 2, is a section on the line *x x* of Fig. 1. Fig. 3, is a section on the line *yy* of Fig. 1. Fig. 4, is an enlarged view of the shifting lever and actuating mechanism. Fig. 5, is a detail of the pivoted guide. Fig. 6, is a sectional view showing the operation of the feed plate; and Fig. 7, is a detail perspective of the feed plate.

Referring to the figures on the drawings: 1 indicates a receptacle or case preferably designed in imitation of a book and consisting of two flat receptacles, which, for the sake of convenience, I will call a repository 2 and a depository 3, hinged together and divided by

35 a partition 4 somewhat lower than the surrounding sides 5.

6 indicates a guide bar secured above the partition and supporting at its center one end of a track 7 secured at its opposite end to the

40 side of the depository 3.

The receptacle 2 is provided with suitable automatic sheet feeding or adjusting mechanism as a feed plate 8 urged upward by a spring 9. The manuscript is placed upon the

45 feed plate, which yieldingly sustains it against a projection 10 upon the guide bar. Adjustably secured in position below this projection is a guide lug 11, which is fixedly adjusted, according to the thickness of the paper at a

50 proper distance below the projection to admit of a single sheet sliding between them.

12 indicates a pivoted guide consisting of a

plate 13 having upon its end a curved track at right angles thereto, one end of which extends through an aperture 14 in the guide bar and is sustained above the paper for a purpose presently to be described. 55

It being the object of my invention to keep but one side of the sheet preceding the one in use continuously exposed, it is necessary to displace each successive sheet without reversing it. I therefore employ laterally displacing mechanism and define it to be mechanism adapted to slide or shift a sheet laterally as contradistinguished from mechanism adapted to turn it upon an axis like the leaves of a book. 60

Freely movable upon the track 7 is a shifter 15 provided with a sheet engaging finger 16 made of thin resilient metal extending therefrom parallel to the track and carrying upon its under side a needle point 17. This finger is adapted to ride upon the curved track of the pivoted guide and to drop upon the paper the point penetrating the minute pervious protecting pad 18 of the top sheet and sliding it between the partition and the guide bar and under the pivoted guide 12 from the repository 2 into the depository 3 when the shifter is propelled toward the opposite end of the track. 65

I have thus far described mechanism whereby the sheets are successively removed from the receptacle 2 by the shifter, and I shall now proceed to describe the mechanism I employ to actuate the shifter to perform its functions. 70

In the lower end of the depository is fixed a motor case 19 sufficiently elevated from the bottom to allow the paper to be deposited beneath it and provided with a slot in its side through which the shifting lever hereinafter described projects. 75

20 indicates, what I will call, a shifting lever pivoted at one end within the motor case and provided at its free end with a longitudinal slot 21 adapted to engage a stud 22 upon the shifter whereby the oscillation of the lever will cause the shifter to travel upon the track 7. Any suitable mechanism may be provided to oscillate this lever, but I prefer to employ that illustrated which consists of a crank 23 fixedly mounted upon a revoluble collar 24 journaled upon a hanger 25 within the case. The collar is also provided with a 80

95

100

small gear wheel 26 geared to a power gear 27, driven by a coil spring 28 secured at one end within the case, and at its opposite end to the revoluble standard 29, which is free to
 5 revolve in one direction independent of the gear to admit of the rewinding of the spring, but when rotated by the spring in the opposite direction is fixedly connected to said gear by a pawl and ratchet as usual, whereby rotary motion is communicated to the crank
 10 through the intermediate gear. The shifting lever is also provided near its pivoted end with a slot 30 similar to the slot 21 adapted to engage the stud 22 of the crank.

15 It is obvious that each revolution of the crank will cause the lever to oscillate and the shifter to travel from its initial position at the right side of the receptacle to the edge of the paper and back again, removing the top
 20 sheet, which will disengage itself from the needle point and drop into the depository when the lateral strain is removed by the pausing of the lever at the limit of its travel.

In order to control the operation of my device to remove the paper as desired, I provide within the case a pivoted trip lever 31
 25 carrying upon one end a right angular notched catch 32 adapted in its normal position to prevent the movement of the lever. When, however, the catch end of the trip lever is
 30 elevated by the depression of its opposite end the shifting lever, thus released, oscillates and riding under the beak of the catch slides under the notch and is automatically locked.

35 The trip lever is preferably provided with a pivoted thumb piece, which may be turned out beyond the lower edge of the receptacle to facilitate its use or it may be swung out of the way when the two parts of the device are
 40 locked together for transportation.

The operation of my device is as follows: The parts being in the position indicated at Fig. 1, the thumb piece is depressed and the lever released, the speaker being supposed to
 45 have finished with the top sheet in the repository. The shifter, impelled by the spring-actuated lever, crosses over to the edge of the paper, and the finger riding upon the curved track drops upon the paper and engages it,
 50 the backward movement of the shifter removing the sheet and depositing it in the depository. The lever is automatically locked, and the parts are in position for a repetition of the operation.

55 I do not desire to limit myself to the details of construction herein shown and described, but reserve to myself the right to vary them at will within the scope of my invention.

What I claim is—

60 1. The combination with a plurality of hinged receptacles, of a transverse track suitably supported by one of said receptacles, a shifter movable thereon, mechanism adapted to engage the sheet in another receptacle and
 65 operatively connected with the shifter, whereby the sheet may be displaced by the movement thereof, shifter actuating mechanism

carried in the first named receptacle, and tripping and locking mechanism in operative relation thereto, whereby the receptacle formed
 70 by closing the two receptacles may contain all the operative mechanism of the device, substantially as specified.

2. In a device for displacing superimposed sheets, the combination with a suitable support, of a movable shifter, a resilient finger
 75 carried thereby provided with an engaging point, and automatically actuated mechanism adapted to automatically raise the finger above the sheet to drop it into engagement
 80 therewith and to retain it in such engagement during the initial retraction of the shifter, substantially as specified.

3. The combination with a plurality of hinged receptacles, of a transverse track suitably supported above one of said receptacles,
 85 a shifter longitudinally movable thereon, a spring finger carried by the shifter and provided with an engaging point, means for sustaining the finger to permit the point to move
 90 above the sheet in the other receptacle and to drop thereon at the proper time, shifter actuating mechanism and tripping mechanism, substantially as specified.

4. In a device for displacing superimposed
 95 sheets, the combination with a movable shifter, of a resilient engaging finger and a curved guide track adapted to sustain the finger when the same is actuated in one direction,
 100 substantially as specified.

5. The combination with a plurality of hinged receptacles, of sheet feeding mechanism in one receptacle, a reciprocatory shifter
 105 movably supported above the other and provided with an engaging finger, automatically actuated shifter actuating mechanism, mechanism for raising the finger over the paper and adapted to permit its engagement there-
 110 with at the proper time, and mechanism for automatically locking the shifter after each reciprocation, substantially as specified.

6. In a device for displacing superimposed sheets, the combination with a receptacle, an automatically actuated feed plate, and a movable shifter provided with a movable engag-
 115 ing finger, of a guide adapted to sustain the finger in proximity to the edge of the sheet and to permit said finger to engage the sheet at a proper time, substantially as specified.

7. In a device for displacing superimposed
 120 sheets, the combination with a receptacle and displacing mechanism therein, of a trip lever controlling the operation thereof and provided with a pivoted thumb piece adapted to be turned into or out of the receptacle as de-
 125 sired, substantially as specified.

8. The combination with a case consisting of two hinged receptacles, of a transverse track above one of said receptacles, a reciprocatory shifter thereon, and adjustable mech-
 130 anism between the receptacles whereby the passage of more than a single sheet from one receptacle into the other is prevented, substantially as specified.

9. In a device for displacing superimposed
sheets, the combination with a track, of a
reciprocatory shifter provided with a resilient
engaging finger and with a stud, an oscilla-
5 tory lever pivoted at one end and provided at
its opposite end with an elongated slot engag-
ing the stud upon the shifter and with a slot
intermediate of its ends, a spring actuated
crank engaging the intermediate slot of the
10 lever whereby the rotation of the crank im-
parts an oscillatory movement to the lever

and a reciprocatory movement to the shifter,
a curved guide track adapted to sustain the
finger when the same is actuated in one direc-
tion and mechanism controlling the operation 15
of the crank, substantially as specified.

In testimony of all which I have hereunto
subscribed my name.

WILLIAM J. ARNEY.

Witnesses:

ALLAN B. WILLIAMS,
FRANK W. HIGGINS.