No. 875,287. PATENTED DEC. 31, 1907.

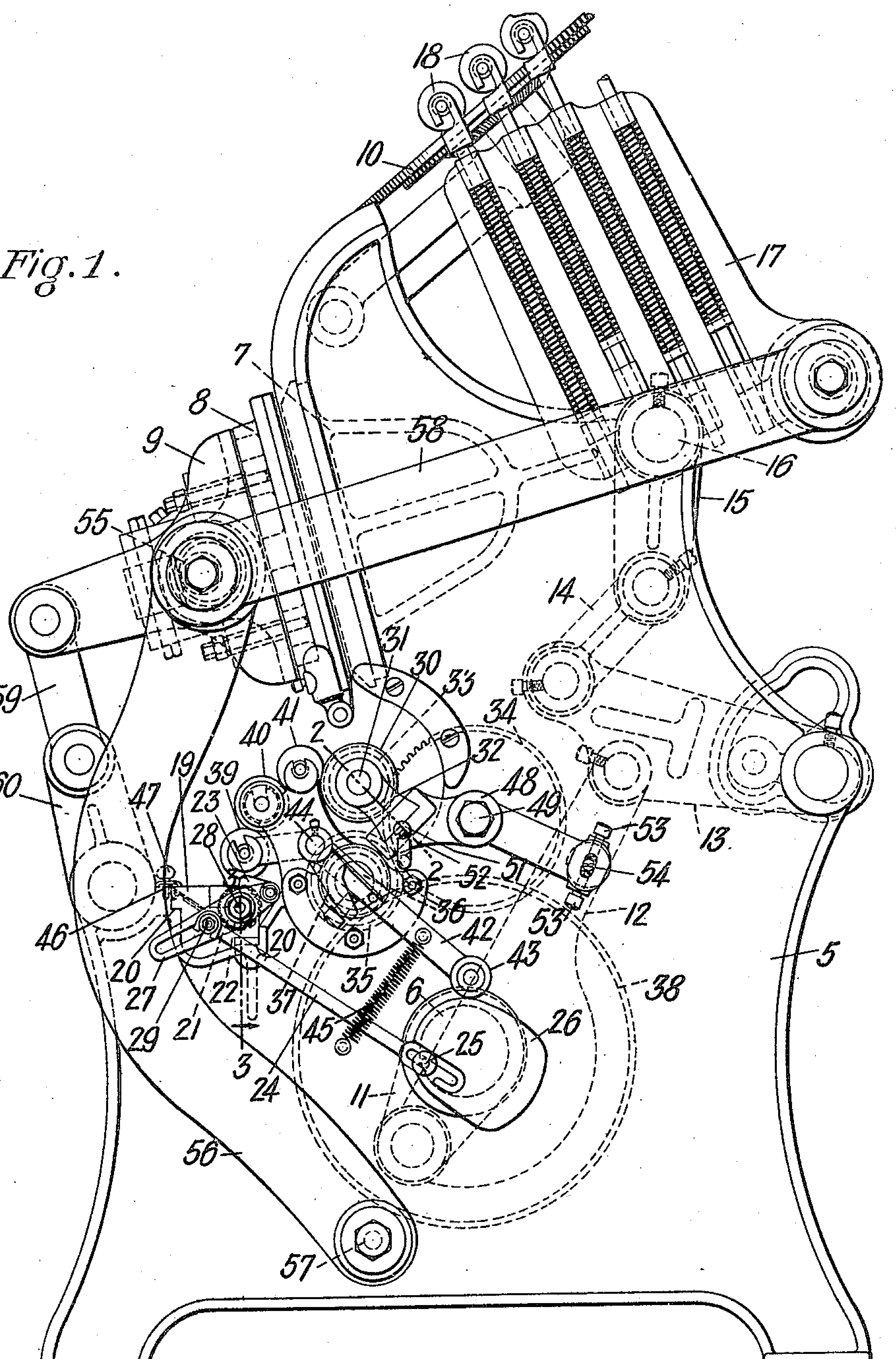
G. W. PROUTY.

PRINTING PRESS.

APPLICATION FILED APR. 2, 1907.

2 SHEETS—SHEET 1.

Fig. 1.



Witnesses:
Ernest A. Telfer
Louis A. Benson

Inventor:
George W. Prouty.
by his attorney Charles S. Gooding.

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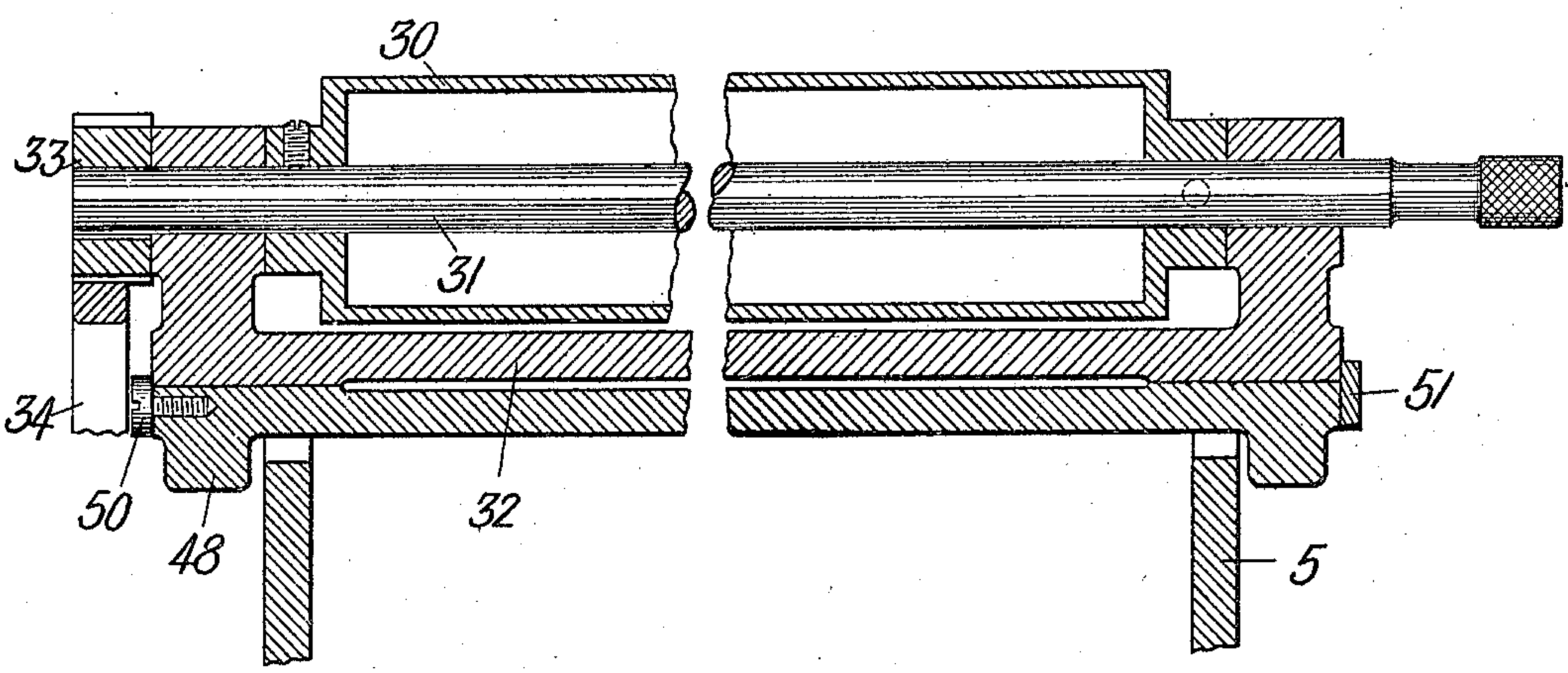
Fig. 2.



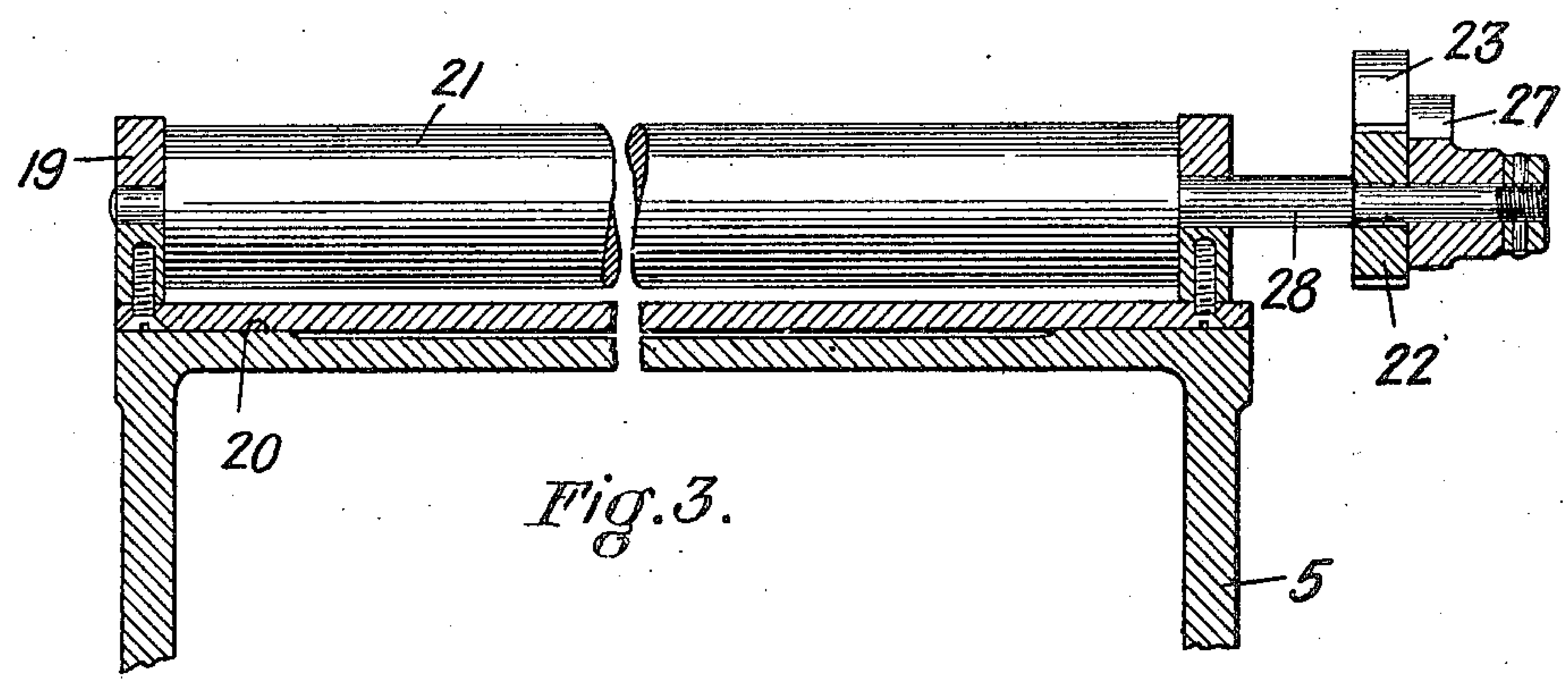


Fig. 3.

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UNITED STATES PATENT OFFICE.

GEORGE W. PROUTY, OF DORCHESTER, MASSACHUSETTS, ASSIGNOR TO THE IMPERIAL ART PRESS CO., A CORPORATION OF MAINE.

PRINTING-PRESS.

No. 875,287. Specification of Letters Patent. Patented Dec. 31, 1907.

Application filed April 2, 1907. Serial No. 365,949.

To all whom it may concern:

Be it known that I, GEORGE W. PROUTY, a citizen of the United States, residing at Dorchester, in the county of Suffolk and State of Massachusetts, have invented new and useful Improvements in Printing-Presses, of which the following is a specification.

This invention relates to improvements in printing presses and is particularly adapted to platen printing presses of the style shown and described in United States Letters Patent granted to me, No. 735,818, patented Aug. 11, 1903, to which reference may be had for details of construction. Said press is of the type in which a platen is pivotally supported upon rocking arms, said platen being moved toward and away from a fixed type bed by suitable mechanism and two sets of ink distributing mechanisms are employed, one located above and the other below said type bed together with an ink distributing disk located above the type bed, the ink being carried across the bed and ink distributing disk by a set of inking rolls supported upon a carrier frame which rocks upon a pivot and carries said rolls from one ink distributing mechanism to the other alternately across the face of said type bed and across the face of said ink distributing disk. It is oftentimes desirable to use both of the sets of ink distributing mechanisms hereinbefore referred to and at other times to use only one ink distributing mechanism.

The object of this invention is to provide a lower ink distributing mechanism which may be removed from the press either wholly or in part so that the rolls can be readily cleansed and also so that the press may be used without the lower ink distributing mechanism, if desired.

The invention consists in the combination and arrangement of parts set forth in the following specification and particularly pointed out in the claims thereof.

Referring to the drawings: Figure 1 is a side elevation of a platen printing press constructed in accordance with my invention, the upper ink distributing mechanism being broken away and removed. Fig. 2 is an enlarged detail section, partly broken away and partly in elevation, taken on line 2—2 of Fig. 1. Fig. 3 is an enlarged detail section, partly in elevation and partly broken away, taken on line 3—3 of Fig. 1, looking toward the right.

Like numerals refer to like parts throughout the several views of the drawings.

In the drawings, 5 is the frame of the press, 6 the main driving shaft, 7 the type bed, 8 the platen, 9 the platen yoke or bridge and 10 the ink distributing disk. The main driving shaft 6 has a crank 11 fast thereto connected by a link 12 to an arm 13, said arm being connected by a link 14 to an elbow lever 15 pivoted at 16 to the frame 5. The elbow lever 15 has a carrier frame 17 fast thereto upon which are slidably supported inking rolls 18. The ink fountain 19 is slidably mounted in ways 20, 20 extending transversely of the main frame 5, there being a fountain roll 21 journaled in said fountain and rotated by means of a ratchet 22 and a pawl 23, said pawl being actuated by a link 24 connected to a crank pin 25, said crank pin being fast to a cam 26. The cam 26 is fast to the main driving shaft 6. The pawl 23 is pivotally mounted on a pawl carrier 27 which rocks upon an ink fountain roll shaft 28 and the link 24 is hooked at one end over a pin 29 fast to said pawl carrier, at the other end the link 24 is hooked over the crank pin 25 so that said link may be detached from said crank pin and from the pin 29 when it is desired to remove the ink fountain 19.

An ink distributing roll or cylinder 30 is fast to a shaft 31, said shaft being journaled in a bearing bracket 32. A gear 33 fast to the shaft 31 meshes into a gear 34. The gear 34 meshes into a gear 35 fast to a shaft 36 journaled in suitable bearings on the main frame 5. A pinion 37 fast to the shaft 36 meshes into a main driving gear 38 fast to the main driving shaft 6. Ink is carried in the usual manner from the ink fountain roll 21 by a ductor roll 39 to a vibrating roll 40 and by said vibrating roll to an intermediate roll 41 which contacts with the ink distributing roll 30. The ductor roll 39 is moved alternately into and out of contact, respectively, with the ink fountain roll 20 and the vibrating roll 40 by a lever 42 having a cam roll 43 journaled thereon, said lever being pivoted at 44 to the frame 5. The roll 43 bears against the periphery of the cam 26 and is held thereagainst by a helical extension spring 45 fast at one end to the lever 42 and at the other end to the frame 5. The ink fountain 19 is normally held in place by a clamp 46 operated by a thumb-screw 47. The bearing bracket 32 is slidably mounted

in ways formed on a secondary frame 48 pivoted at 49 to the main frame 5.

A stop-screw 50 limits the movement of the bearing bracket 32 toward the left, Fig. 2, while a latch 51 pivoted at 52 to the frame 48 normally prevents the bearing bracket 32 from sliding out of the frame 48. The secondary frame 48 may be adjusted by adjusting screws 53, 53 which bear against a screw 54 fast to the frame 5. When it is desired to move the ink distributing roll 30 the latch 51 is rocked on its pivot 52 out of engagement with the bearing bracket 32 and said bearing bracket is then withdrawn entirely out of the ways formed on the secondary frame 48. The rolls 39, 40 and 41 being journaled in open boxes may be lifted out of their places.

When it is desired to remove the ink fountain 19 from the press, the link 24 is removed by unhooking the same from the pin 29 and the crank pin 25, the spring 45 being detached from the lever 42. The thumbscrew 47 is then rotated in the proper direction to release the clamp 46 from the ink fountain 19, whereupon said ink fountain may be withdrawn bodily from its place on the ways 20, 20.

The platen yoke 9 is pivoted at each end thereof at 55 to two arms 56, one of which is provided upon each side of the frame 5 of the press and is pivoted at 57 to said frame. The pivots 55, 55 are connected by drawbars or links 58, one upon each side of the frame 5, to the carrier frames 17, there being two of said frames one on each side of the frame 5. The yoke 9 is connected by a link 59 to an arm 60 mounted on the frame 5.

In the operation of the press the inking rolls 18 are carried by the rocking carrier frames 17 downwardly from the position shown in Fig. 1 across the ink distributing disk 12, across the type bed 7 and downwardly into contact with the ink distributing roll 30 by the rocking of the ink roll carrier frames 17, said frames being rocked by the elbow lever 15, link 14, arm 13, and crank 11. When the inking rolls 18 are at the upward end of their paths of movement, the platen 8 is brought into contact with the type upon the type bed 7 by the links 58, said platen rocking upon its pivots 55 and being controlled in its movement to be brought into contact with the type by the link 59 and arm 60 in a manner well known to those skilled in the art.

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

1. In a printing press, a main frame provided with ways extending transversely thereof, an ink fountain slidably mounted on said ways and constructed to be removed therefrom by sliding relatively thereto, a fountain roll, and a series of rolls journaled on said frame, said rolls being adapted to receive ink from said fountain roll.

2. In a printing press, a main frame provided with ways extending transversely thereof, an ink fountain slidably supported on said ways and constructed to be removed therefrom by sliding relatively thereto, a fountain roll, and a series of rolls journaled on said frame and constructed to be detached therefrom, said rolls being adapted to receive ink from said fountain.

3. In a printing press, a main frame provided with ways extending transversely thereof, an ink fountain slidably supported on said ways, a series of rolls adapted to receive ink from said ink fountain, a bearing bracket on which one of said rolls is journaled, and ways in which said bearing bracket is arranged to slide transversely of said frame.

4. In a printing press, a main frame provided with ways extending transversely thereof, an ink fountain slidably supported on said ways, a series of rolls adapted to receive ink from said ink fountain, a bearing bracket on which one of said rolls is journaled, and a secondary frame provided with ways in which said bearing bracket is arranged to slide transversely of said main frame.

5. In a printing press, a main frame provided with ways extending transversely thereof, an ink fountain slidably supported on said ways, a series of rolls adapted to receive ink from said ink fountain, a bearing bracket on which one of said rolls is journaled, and a secondary frame provided with ways in which said bearing bracket is arranged to slide transversely of said main frame, said secondary frame being pivoted to said main frame with its axis extending transversely thereof.

6. In a printing press, a main frame provided with ways extending transversely thereof, an ink fountain slidably supported on said ways, a series of rolls adapted to receive ink from said ink fountain, a bearing bracket on which one of said rolls is journaled, a secondary frame provided with ways in which said bracket is arranged to slide transversely of said main frame, and means to adjust said secondary frame.

7. In a platen printing press, a main frame provided with ways extending transversely thereof, an ink fountain slidably mounted on said ways and constructed to be removed therefrom by sliding relatively thereto, a fixed type bed located above said fountain, a fountain roll journaled in said fountain, a series of inking rolls including an ink distributing roll journaled on said frame and constructed to be detached therefrom, said series of rolls adapted to receive ink from said fountain roll, an inking roll carrier frame, inking rolls rotatably supported on said car-

rier frame, and means for vibrating said carrier frame, whereby said inking rolls are moved into and out of contact with said ink distributing roll and across the face of said type bed.

8. In a platen printing press, a main frame provided with ways extending transversely thereof, an ink fountain slidably mounted on said ways and constructed to be removed therefrom by sliding relatively thereto, a fixed type bed located above said fountain, a fountain roll journaled in said fountain, a series of ink rolls including an ink distributing roll journaled on said main frame and constructed to be detached therefrom, said series of rolls adapted to receive ink from said fountain roll, an inking roll carrier frame, inking rolls rotatably supported on said carrier frame, and means for vibrating said carrier frame, whereby said inking rolls are moved into and out of contact with said ink distributing roll and across the face of said type bed.

9. In a platen printing press, a main frame provided with ways extending transversely thereof, an ink fountain slidably mounted on said ways, a fixed type bed located above said fountain, a fountain roll journaled in said fountain, a series of ink rolls including an ink distributing roll, said series of rolls adapted to receive ink from said fountain roll, a bearing bracket on which said ink distributing roll is journaled, ways in which said bracket is arranged to slide transversely of said main frame, an inking roll carrier frame, inking rolls rotatably supported on said carrier frame, and means for vibrating said carrier frame, whereby said inking rolls are moved into and out of contact with said ink distributing roll and across the face of said type bed.

10. In a platen printing press, a main frame provided with ways extending transversely thereof, an ink fountain slidably mounted on said ways, a fixed type bed located above said fountain, a fountain roll journaled in said fountain, a series of ink rolls including an ink distributing roll, said series of ink rolls adapted to receive ink from said fountain roll, a bearing bracket on which said ink distributing roll is journaled, a secondary frame provided with ways in which said bearing bracket is arranged to slide transversely of said main frame, an inking roll carrier frame, inking rolls rotatably supported on said carrier frame, and means for vibrating said carrier frame, whereby said inking rolls are moved into and out of contact with said ink distributing roll and across the face of said type bed.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

GEORGE W. PROUTY.

Witnesses:
LOUIS A. JONES,
ANNIE J. DAILEY.