

No. 810,638.

PATENTED JAN. 23, 1906.

D. GESSNER.
CLOTH PRESSING MACHINE.
APPLICATION FILED AUG. 12, 1903.

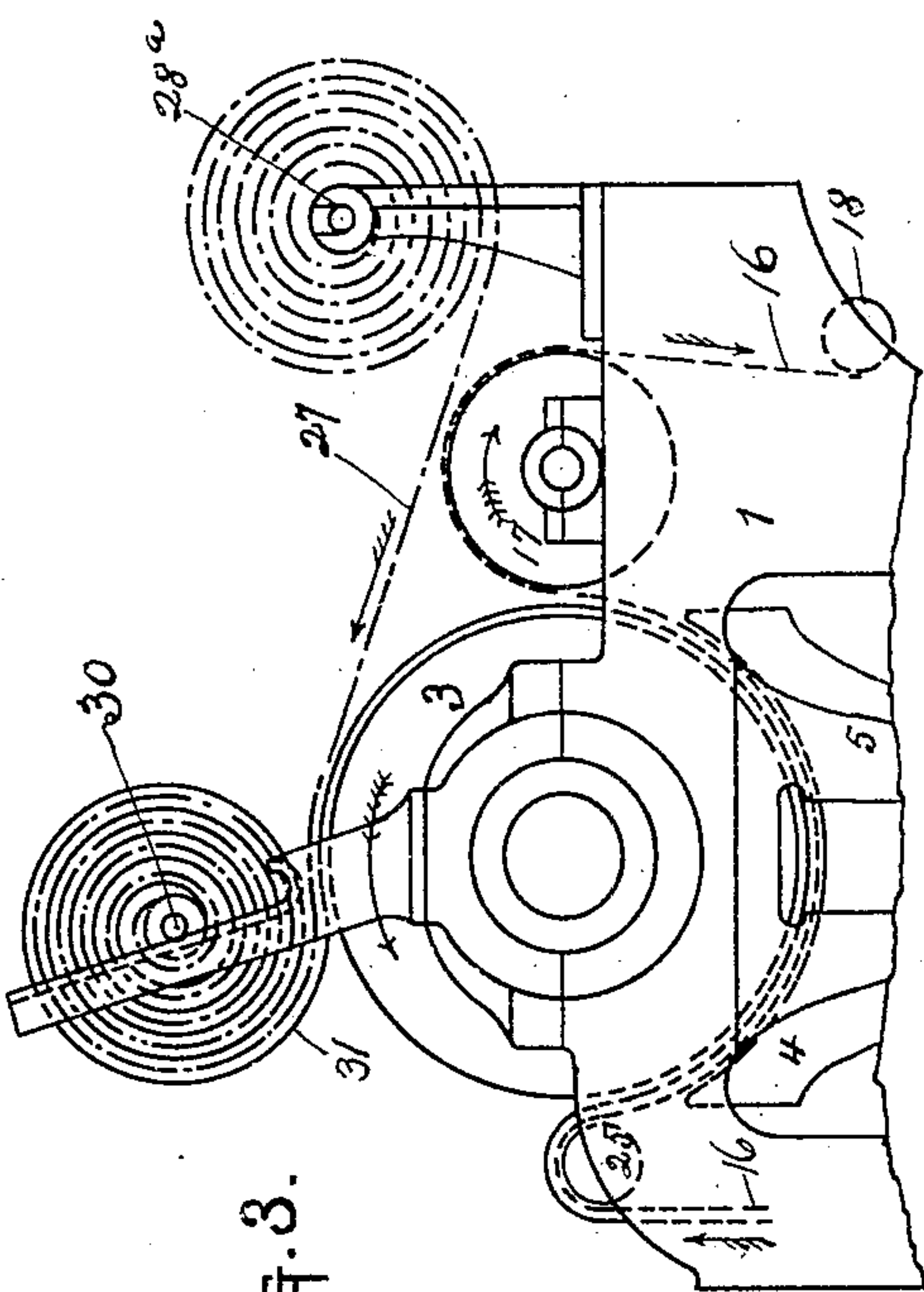


FIG. 3.

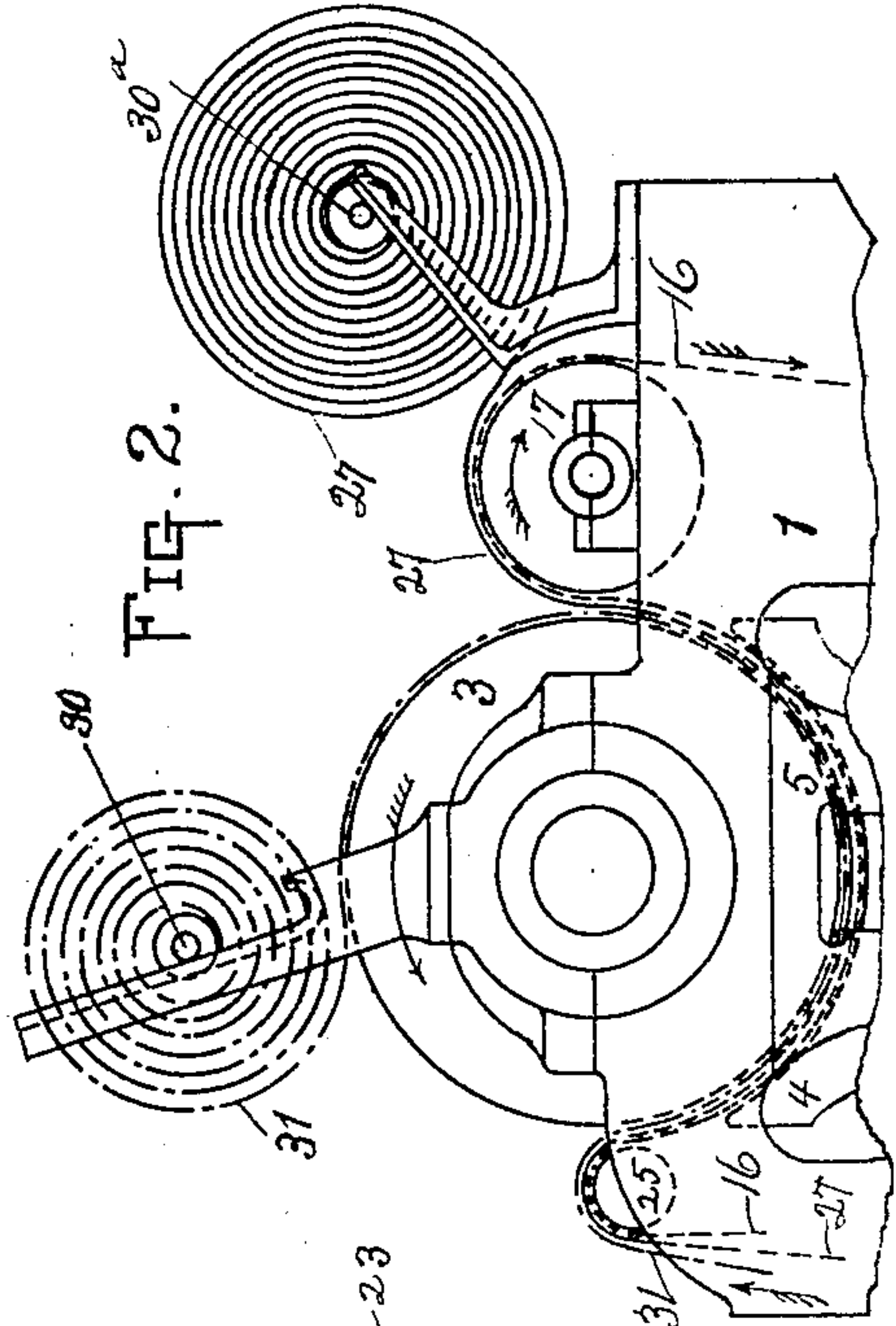


FIG. 2.

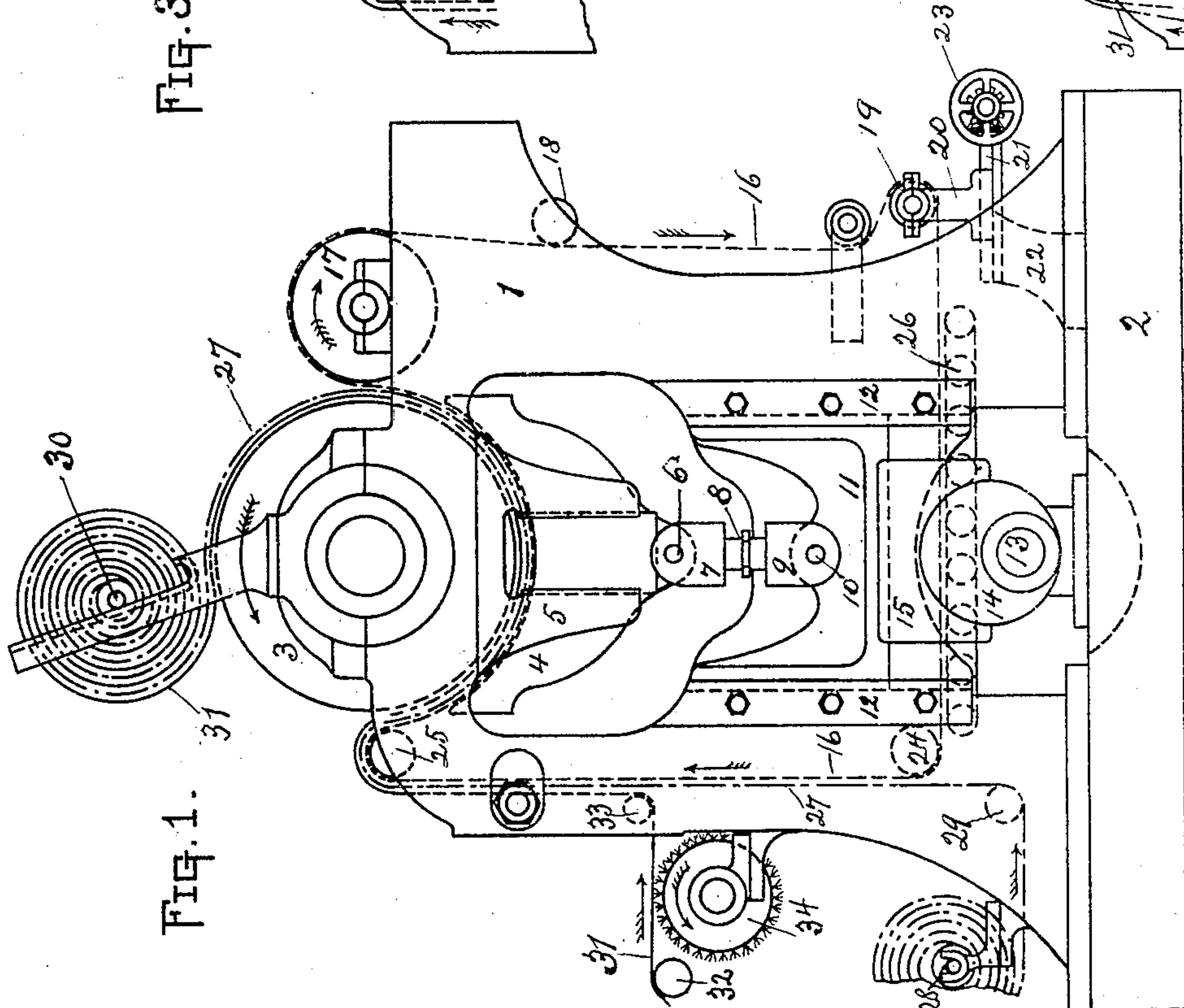


FIG. 1.

Witnesses.
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UNITED STATES PATENT OFFICE.

DAVID GESSNER, OF WORCESTER, MASSACHUSETTS.

CLOTH-PRESSING MACHINE.

No. 810,638.

Specification of Letters Patent.

Patented Jan. 23, 1906.

Application filed August 12, 1903. Serial No. 169,226.

To all whom it may concern:

Be it known that I, DAVID GESSNER, a citizen of the United States, and a resident of Worcester, county of Worcester, and State of Massachusetts, have invented a new and useful Improvement in Cloth-Pressing Machines, of which the following is a specification.

The object of my present invention is to provide means whereby cloth may be given the qualities which have heretofore been given to it by hand operations, such as plate-pressing and sponging, to provide the cloth with a finish which is largely free from liability to being spotted by water or shrinking.

The apron or aprons that I employ in carrying out this invention are preferably applied to a machine which is substantially like that described in my Letters Patent No. 565,072, dated August 4, 1896, to which reference is hereby made and which machine is shown in the accompanying drawings to the extent that is necessary for a disclosure of this invention, taken in connection with the description of said patent.

In the accompanying drawings, Figure 1 is an end view of the machine. Figs. 2 and 3 are end views of sufficient of the machine to show two modifications of the form shown in Fig. 1.

1 is the end frame, fastened to one end of the base-plate 2.

3 is the main or pressing cylinder, which is internally heated by steam.

4 is the bed or press plate, which is internally heated and which can be moved vertically up and down, being guided in this direction by forked guides 5. At 6 the bed-plate is shackled to link 7, which has a screw-threaded connection 8 to unite it with the shackle 9, which at 10 is pivotally connected to carriage 11, that moves in guides 12 of the frame 1, so that when the cam-shaft 13 is turned so as to bring the cam 14 into the position shown in the drawings it will force (through pillow-block 15) the carriage 11 upward, bringing the bed-plate 4 into pressing position.

The manner in which the shaft 13 is operated need not be reiterated here, as it has been fully described in my Patent No. 565,071, dated August 4, 1896, which was pending at the same time as my Patent No. 565,072 above referred to.

16 is a dry endless felt apron passing be-

tween the cylinder 3 and the bed-plate 4 over the cylinder 17, which is driven in the direction of the arrow from the main cylinder 3, as shown in my said Patent No. 565,071.

18 is a swivel-roller on the outside of the apron, which by its swivel acts as an automatic regulator to insure the straight run of the apron 16. 19 is another roller mounted upon a carriage 20, which slides upon ways 21 on a bracket 22 and is operated by a hand-wheel 23, so as to serve as a take-up for the slack of the apron.

24 25 are apron-guide rolls.

26 is a coil of steam-pipes whereby the apron 16 is maintained dry.

27 is a non-endless moist cotton apron, which in Fig. 1 extends from the supply-roll 28 under and over the guide-rolls 29 and 25, between the endless apron 16 and the cylinder 3, to the lap-roll 30. In Fig. 2 it extends to the lap-roll 30^a. In Fig. 3 it extends from the lap-roll 28^a to the lap-roll 30 without passing between the bed and cylinder, as in the other figures. The supply-roll of the apron 27 is wet before it is placed in the machine.

31 is the cloth which is guided by the rolls 32 and 33 past the brush 34 to the roll 25, whence (in Fig. 1) it enters between the heated cylinder 3 and the moist apron 27 and continues with the moist apron 27 and is wound up therewith upon the lap-roll 30. In Fig. 2 the cloth pursues the same course, excepting that it is wound up separately from the wet apron 27. In Fig. 3 the cloth pursues the same course and is wound up with the apron 27, which, however, it does not join until after it has been pressed on the heated cylinder 3. In all of the figures the cloth is shown as being next to the surface of the cylinder 3, the apron or aprons being between it and the press-plate. Although for many kinds of cloth I prefer this arrangement, I do not wish to be limited thereto, because the position of the cloth and wet apron may be reversed, bringing the wet apron next the surface of the cylinder 3. Where the moist apron does not come between the cloth and the bed-plate and the cloth is of such a texture as to stand the friction against the bed-plate, the felt apron 16 may be dispensed with. For example, in the construction shown in Fig. 3 with certain kinds of cloth the apron 16 might be omitted.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In a rotary cloth-press, in combination, 5 a cylinder, a presser, two aprons running between the same and means whereby one of said aprons is wound up with the cloth.

2. In a rotary cloth-press, in combination, 10 a cylinder, a presser, two aprons running between the same; one of said aprons being endless and the other non-endless and means whereby the non-endless apron is wound up.

3. In a rotary cloth-press, in combination, 15 a cylinder, a presser, means whereby the cloth is conducted between the cylinder and presser, a non - endless apron and means whereby the same is wound up with the cloth.

4. In a rotary cloth-press, in combination, 20 a cylinder, a presser, a dry apron running in contact with the presser and a moist apron running in contact with the cloth between the dry apron and the cloth.

5. In a rotary cloth-press, in combination, 25 a cylinder, a presser, a dry apron running in contact with the presser and a moist apron running with the cloth between the dry apron and the cylinder and means whereby the cloth and said moist apron are wound up together. 30

6. In a rotary cloth-press, in combination, a cylinder, a presser, a dry apron running be-

tween the cloth and presser, a moist apron and means whereby the moist apron is wound up with the cloth. 35

7. In a rotary cloth-press, in combination, a cylinder, a presser, a non - endless apron, means whereby the cloth and non - endless apron are conducted between the cylinder and presser and means whereby said non-end- 40 less apron is wound up with the cloth after leaving said presser.

8. In a rotary cloth-press, in combination, a heated cylinder, a presser, a non - endless apron, means whereby the cloth and non- 45 endless apron are conducted between the cylinder and presser, means whereby they are held in contact with the cylinder after passing beyond the presser and means whereby they are thereafter wound up together. 50

9. In a rotary cloth-press, in combination, a cylinder, a presser, means whereby the cloth is conducted between the same, a non- 55 endless apron, and means whereby the cloth and non-endless apron are after leaving said presser held in contact with a heated surface and wound up together.

In testimony whereof I have hereunto signed my name in the presence of two subscribing witnesses.

DAVID GESSNER.

Witnesses:

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WALTER A. PAULING.