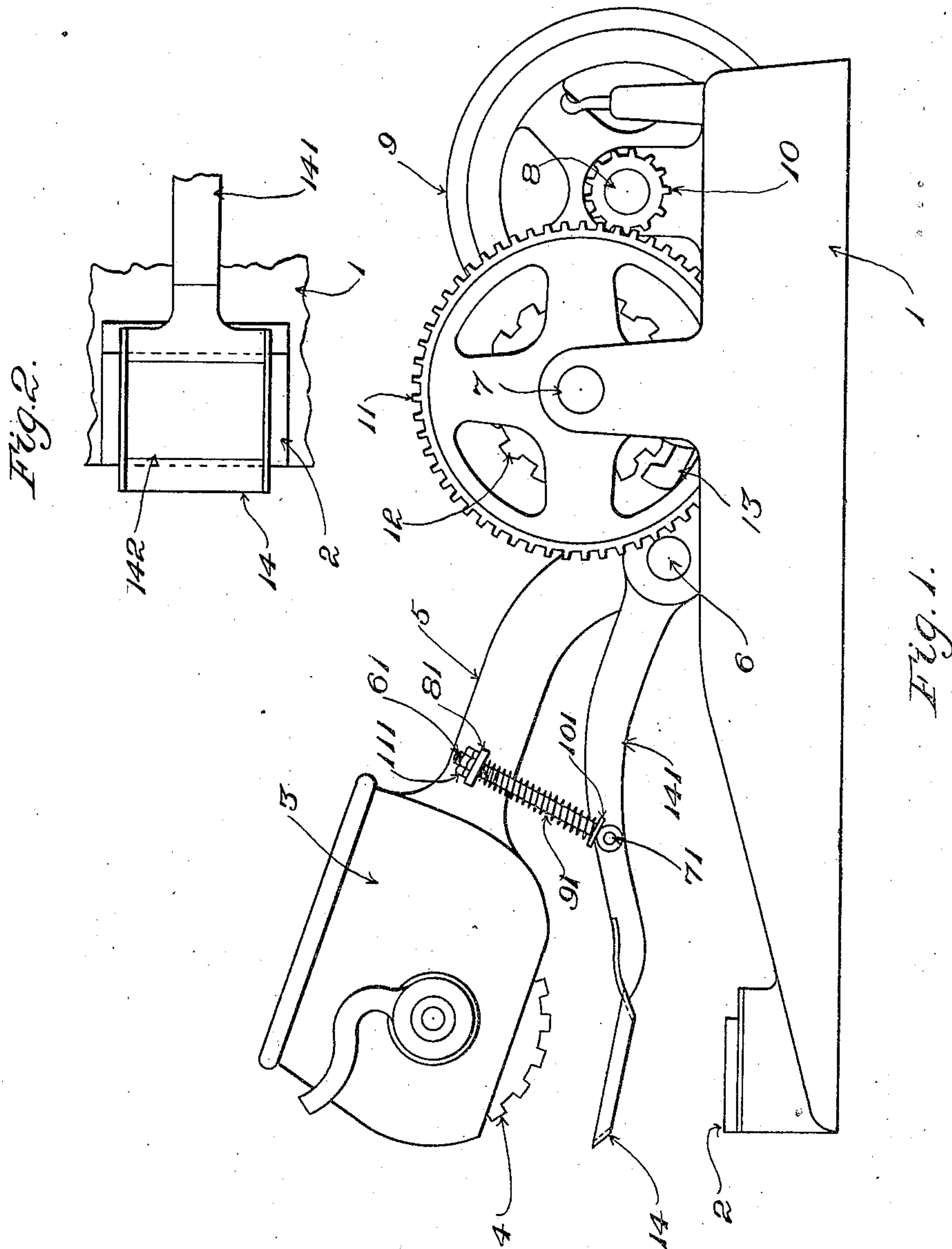


No. 874,358.

PATENTED DEC. 17, 1907.

J. FRENCH.
STAMPING AND NUMBERING MACHINE.
APPLICATION FILED JAN. 17, 1907.



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UNITED STATES PATENT OFFICE.

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STAMPING AND NUMBERING MACHINE.

No. 874,358.

Specification of Letters Patent.

Patented Dec. 17, 1907.

Application filed January 17, 1907. Serial No. 352,676.

To all whom it may concern:

Be it known that I, JOSEPH FRENCH, a citizen of the United States, residing at Woonsocket, in the county of Providence, State of Rhode Island, have invented a certain new and useful Improvement in Stamping and Numbering Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention relates to power stamping and numbering machines, and has been designed more especially as an improvement in machines of the general class of which the machine of United States Letters Patent to James D. Humphrey and myself, No. 660,512, dated October 23, 1900, constitutes an example.

The general object of the invention is to provide means by which the material which is to be stamped or numbered shall be held firmly in place upon the work-support at the time of being stamped or marked, and whereby the said material shall be prevented from wrinkling or turning over upon itself at such time.

A special aim of the invention is to facilitate the operation of imprinting or marking upon laundry articles, and other articles composed of cloth or similarly flexible material.

The invention consists in the combination with the work-support and the printing-head of a stamping or numbering machine, of a hold-down device or presser which engages with the article placed upon the said work-support and operates to hold the said article properly in position at the time of the movement of the printing head toward the work-support.

The invention consists further in a hold-down device or presser, such as aforesaid, operatively connected with the printing head and actuated through the movement of the latter.

An embodiment of the invention is shown in the drawings, in which latter,—

Figure 1 shows in front side elevation a machine of the class aforesaid. Fig. 2 is a detail view in plan.

Having reference to the drawings,—at 1, Fig. 1, is the base or bed of the frame of the machine shown in the drawings, and at 2 is the work-support.

At 3 is the printing head, or as it sometimes is called, type-wheel carrier. At 4 is

one of the settable type-wheels which are mounted upon the said printing head or carrier, only a portion of the wheel which is at the front in Fig. 1 being shown in the latter figure.

At 5 is the supporting arm of the printing-head or type-wheel carrier, the said supporting arm being shown pivoted at 6 upon the base or bed 1, and, as in the machine of the United States Letters Patent aforesaid, may be operated by a cam, not shown, mounted upon the shaft 7, Fig. 1, and said shaft and cam may be arranged as in the said patent to stand still normally with the printing-head or type-wheel carrier in the raised position which they occupy in Fig. 1, and to be actuated by means of suitable connections with the driving-shaft 7 at the will of the operator, to depress the said arm and printing-head so as to carry the printing surfaces into contact with the article resting upon work-support 2.

Fig. 1 shows the driving shaft 8 provided with a band-wheel 9 for the reception of driving power, and having fixed thereon a spur-pinion meshing with a spur-gear 11 turning loosely upon the shaft 7. As in the patent, it is intended that wheel 11 shall have combined therewith clutch-devices, including as part thereof the clutch-wheel 11 and dog 13 for engagement therewith, by means of which to make the wheel 11 fast with the shaft 6 at the will of the operator, when it is desired to rotate the cam aforesaid so as to cause the printing-head or type-wheel carrier to act. At 14 is the hold-down device or presser. It is carried by the arm 141, the latter being hung upon the shaft 6 of the supporting-arm 5 of the printing-head or type-wheel carrier so as to swing concentrically with the said supporting arm and printing-head or type-wheel carrier. The under portion of the hold-down or presser 14 is adapted to make contact with the upper surface of the work-support 2, or with the article resting upon the said work-support, and the said hold-down or presser is formed with an opening 142 therethrough shown most clearly in Fig. 2 to admit the acting portions of the type-wheels 4 and enable the printing characters which have been adjusted into position to print to make contact with the article which is to be printed or marked. The opposite sides of the said opening are shaped to clear the printing characters at right and left of those which have been adjusted to the

printing line. It is intended that the hold-down or presser normally shall occupy an elevated position separated from the surface of the work-support sufficiently to admit of the article to be imprinted or marked being passed in between them, and also so as to enable the said article to be adjusted as may be necessary, and it is operatively combined with the printing-head or its supporting-arm 5, so as to cause the same to be raised from the work-support at the time of the ascent of the printing-head and its supporting-arm, and depressed against the said surface at the time of the descent of the printing-head and its supporting arm. In the present instance, a rod 61 is connected with the arm 141 of the hold-down or presser by a pivotal pin or stud 71, the said rod extending upwardly from the said pivotal pin or stud and its slot being passed through the hole of a swivel-piece 81 which is carried by the supporting arm 5, the said swivel-piece being free to turn on a horizontal axis in well-known manner to accommodate itself to the varying inclination of the rod 61 as the distance between the arms 5 and 141 changes. An expanding spiral spring 91 is compressed between a collar 101 on the lower part of the rod 61 and the under side of the said swivel-piece 81, while a nut and lock-nut 111 are applied to the threaded upper end of the rod 6 above the said swivel-piece. In the descent of the supporting-arm 5 and printing-head the swivel-piece 81 acts against the spring 91 to carry the arm 141 and hold-down or presser toward and against the work-support 2 or the article resting thereon. After the hold-down or presser encounters the work-support or the said article, the continued descent of the supporting-arm 5 and printing-head 3 causes the spring 91 to be somewhat compressed by the further action of the swivel-piece 81 thereagainst, thus operating to cause the hold-down or presser to act with yielding force at the time of the printing movement. In the upward movement of the supporting-arm and printing-head the swivel-piece 81 engages with the nut at 111 (or with the lower one of the nuts

when two are employed) and acts to lift the arm 141 and work-holder or presser, thereby restoring it to its position in Fig. 1.

The form and construction of the hold-down or presser, the manner of mounting it in the machine, and the mode and means of operating the same may be varied without involving departure from the broad principles of the invention.

What is claimed as the invention is,—

1. In a stamping or numbering machine, in combination, a stationary work-support, a printing-head movable toward and from the said stationary work-support for the purpose of numbering or marking an article thereon, a work- hold-down or presser, and means whereby the said hold-down or presser is operatively engaged with the said printing-head and actuated thereby, the said means embracing a spring intermediate the printing-head and the hold-down or presser and having its tension increased through the printing movement of the printing-head to bear the hold-down or presser with yielding force against the article placed upon the stationary work-support and thereby clamp the said article fixedly on the work-support as the carrier approaches, and at the time of the impression.

2. In a stamping or numbering machine, in combination, the swinging printing-head, the stationary work-support, the rigid work-holder or presser, the supporting arm for said work-holder or presser, and means for transmitting yielding pressure from the printing-head to the work hold-down or presser to thereby actuate the latter to clamp the article which is to be numbered or marked fixedly upon the stationary work-support as the printing-head approaches the latter, and at the time of the impression.

In testimony whereof I affix my signature in presence of two witnesses.

JOSEPH FRENCH

Witnesses:

CHAS. F. RANDALL,
EDITH J. ANDERSON.