(No Model.)

J. C. F. KUNKLE.

MACHINE FOR LAYING GOLD LEAF.

No. 361,225. Patented Apr. 12, 1887.

Fig. 1.

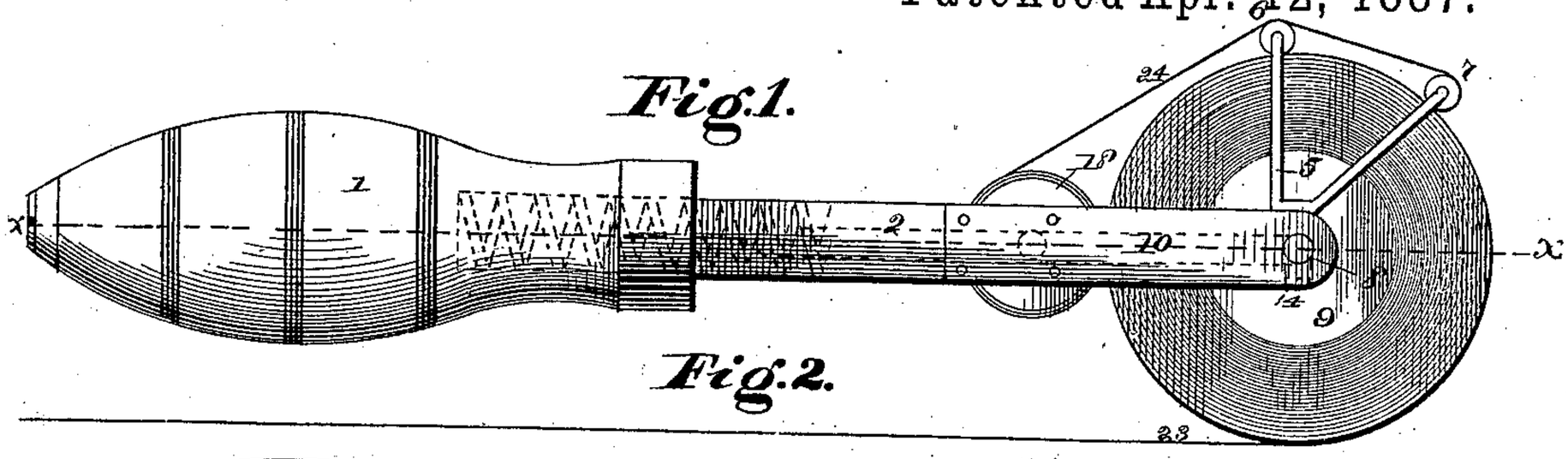


Fig. 2.

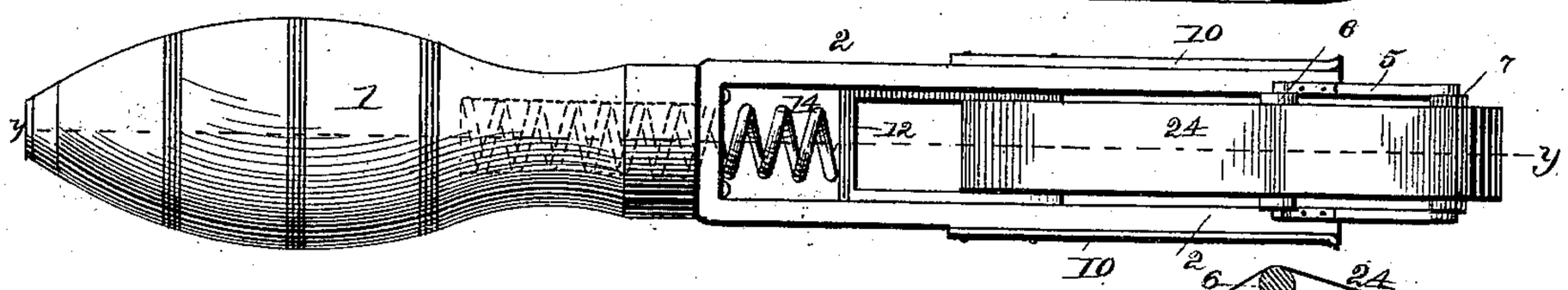


Fig. 4.

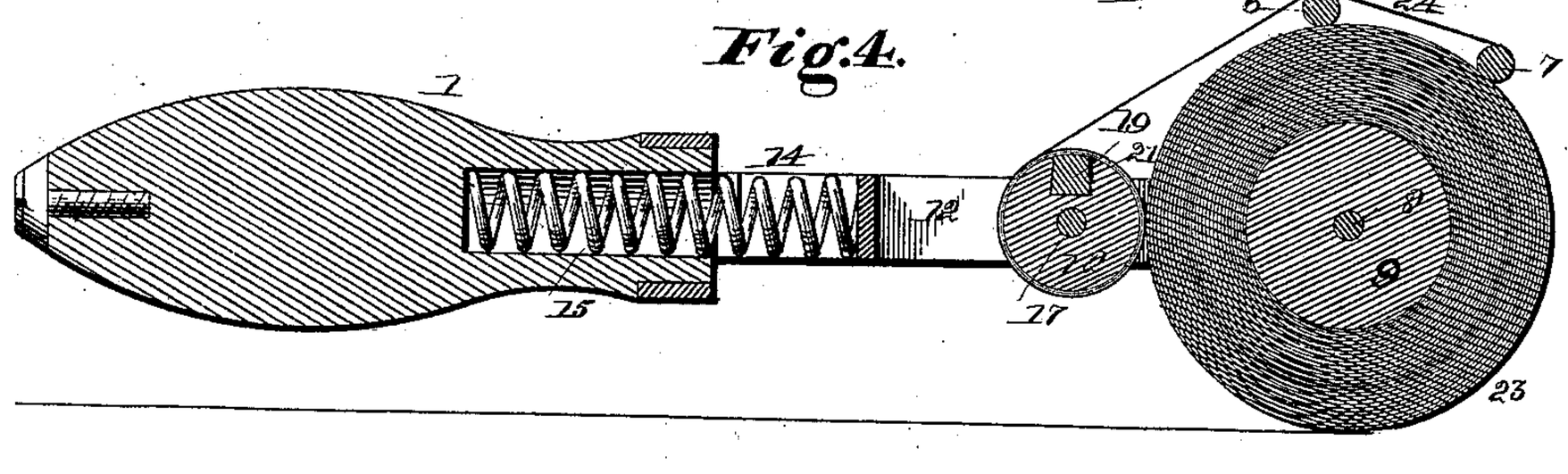


Fig. 3.

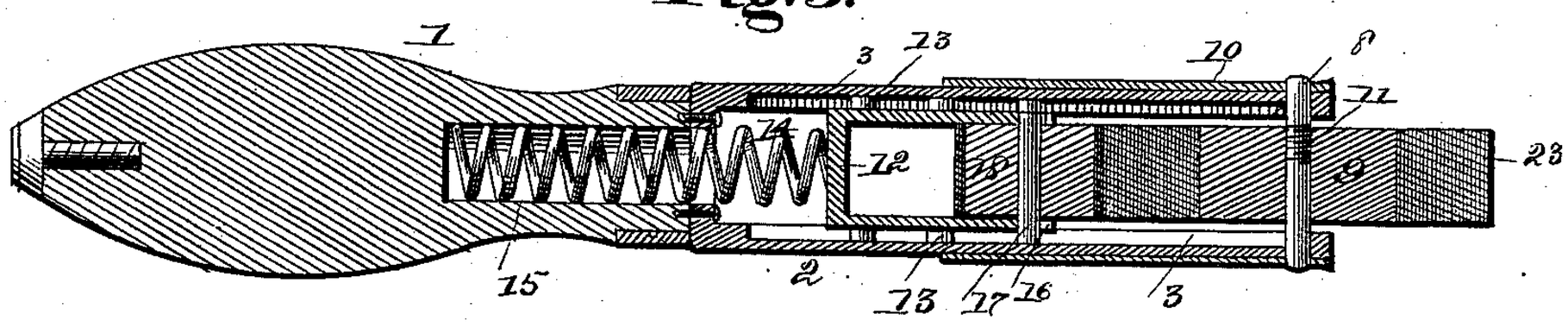
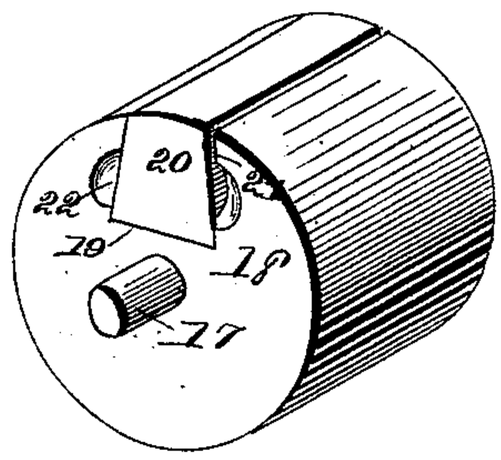


Fig. 5.



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UNITED STATES PATENT OFFICE.

JOHN C. F. KUNKLE, OF JERSEY SHORE, PENNSYLVANIA.

MACHINE FOR LAYING GOLD-LEAF.

SPECIFICATION forming part of Letters Patent No. 361,225, dated April 12, 1887.

Application filed January 24, 1887. Serial No. 225,340. (No model.)

To all whom it may concern:

Be it known that I, JOHN C. F. KUNKLE, a citizen of the United States, and a resident of Jersey Shore, in the county of Lycoming and State of Pennsylvania, have invented certain new and useful Improvements in Machines for Laying Gold-Leaf; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a side view of my improved device for laying on gold or other metallic leaf in strips. Fig. 2 is a top view of the same. Fig. 3 is a longitudinal sectional view on line *x x*, Fig. 1. Fig. 4 is a longitudinal sectional view on line *y y*, Fig. 2; and Fig. 5 is a perspective detail view of the roller for receiving the paper strip.

Similar numerals of reference indicate corresponding parts in all the figures.

My invention has relation to devices for laying on metallic leaf in strips for the purpose of lettering or striping in the said leaf; and it consists in the improved combination and construction of parts of a device having the metallic leaf placed upon a strip of paper rolled upon a roller and having means for holding the said roller so that it may be propelled over the surface to be covered with the leaf, the leaf adhering to the surface and the strip of paper being carried off to a suitable receiving-roller, as hereinafter more fully described and claimed.

In the accompanying drawings, the numeral 1 indicates a handle having a frame consisting of two arms, 2, secured to its end, and the inner sides of these arms are formed with longitudinal grooves 3, extending to near the outer ends, where they are bent downward to form downwardly-extending grooves 4, carried to the edges of the arms. Two pairs of arms, 5, are secured, projecting upward, upon the upper edges of the outer ends of the arms, and small rollers 6 and 7 are journaled between the ends of these arms. The shaft 8 of a roller, 9, is journaled with its ends in the outer ends of the grooves in the arms, and are held in place in the said ends by means of springs 10, having bearings for the ends of the shaft, the downwardly-bent extensions of the grooves being open through the outer sides of the arms, and the middle of the shaft is formed with a screw-threaded portion, 11, by means of which it is secured in the bore of the roller.

A forked frame, 12, is formed with laterally-projecting lugs, 13, upon the outer sides of its arms, and a coiled spring, 14, bears with its outer end against the cross-piece of the frame, and has its inner end secured in a socket, 15, in the end of the handle, and the outer ends of the arms of the forked frame are formed with bearings or rounded notches 16, in which the ends of the shaft 17 of a roller, 18, are journaled. This roller is formed with a dovetailed recess, 19, into which a correspondingly-shaped block, 20, fits, a narrow notch, 21, being formed between one side of the recess and the block, and one face of the roller is formed with small recesses or notches at the sides of the recess, as shown at 22, for the purpose of allowing the block to be grasped by the fingers and pulled out.

When the device is to be put into operation, the gold-leaf or other metallic leaf is cut into strips of the required width, the said leaf being shown in exaggerated thickness at 23 in the drawings, and the strips of gold-leaf are thereupon placed upon a strip, 24, of waxed paper, whereupon the entire strip is wound upon the roller between the outer ends of the frame-arms. The free end of the strip of paper is secured into the notch in the receiving-roller by means of the dovetailed block, and this roller is kept in contact with the delivery-roller and the strip upon the same, so that it may be revolved by it. When, now, the delivery-roller is brought to bear upon the surface to be covered with the leaf, the revolving roller will deliver the strip of leaf upon the surface, and the paper strip will pass over the two small rollers, over the wheel, and be rolled upon the receiving-roller, which will continually be held in contact with the delivery-roller by the coiled spring, which will also serve to keep the delivery-roller in the outer ends of the arms, the receiving-roller sliding with its frame between the arms of the main frame.

It will be seen that this device may be used with strips of leaf of different width, and that

the leaf may be placed upon the surface to be covered with less waste and loss of leaf than by the usual method of placing leaf upon the prepared surface.

When it is desired to remove the delivery-roller, the springs at the ends of the arms are drawn apart, when the roller may be removed and the receiving-roller may now be carried out to the ends of the arms and removed in the same manner, and the shaft may be removed and inserted into a new roller and the end of the new strip secured in the receiving-roller.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. A device for laying on metallic leaf, consisting of a suitable frame or handle, a spring secured upon each side thereof, and a roller journaled in by rings in the ends of said springs and having a strip of paper rolled upon it with a strip of metallic leaf placed upon it, as and for the purpose shown and set forth.

2. A device for laying on metallic leaf, consisting of a suitable frame, a delivery-roller journaled in the outer end of the frame and having a strip of paper wound upon it, a forked frame within said first frame with a strip of metallic leaf placed upon it, and a receiving-roller journaled within said forked frame for receiving the empty paper strip after delivering the strip of leaf, as and for the purpose shown and set forth.

3. In a device for laying on metallic leaf, the combination of a suitable frame or handle, a roller journaled in the outer end of the frame and having a strip of paper having a strip of metallic leaf upon it wound upon it, two guide-rollers journaled above the delivery-roller and having the paper strip passing over them, and a receiving-roller journaled inside of the delivery-roller and having the end of the paper strip secured to it and having means for being held in contact with the delivery-roller, as and for the purpose shown and set forth.

4. In a device for laying on metallic leaf, the combination of a handle having two arms formed with longitudinal grooves in their inner sides and formed with downwardly-extending slots in the ends of the arms forming continuations of the grooves, springs secured to the outer sides of the arms and having bearings in the ends of their inner sides, a roller having its shaft journaled in the slots and in the bearings of the springs and having a strip of paper with a strip of metallic leaf upon it, a forked frame sliding with laterally-projecting studs in the grooves of the arms and having bearings or notches in the ends of its arms, a coiled spring bearing against the frame and secured in a socket in the end of the handle, a receiving-roller journaled with the ends of its shaft in the notches of the frame and having the end of the strip secured to it, and guide-rollers journaled in the ends of arms above the delivery-roller and having the strip carried over them from the delivery-roller, as and for the purpose shown and set forth.

5. In a device for laying on metallic leaf, the combination of a handle having two arms, the ends of which are provided with downwardly-extending slots, a delivery-roller journaled in said slots having a strip of paper with a strip of metallic leaf upon it, a spring-actuated roller adapted to be forced into contact with said delivery-roller for receiving the paper, as and for the purpose shown and set forth.

6. The combination of the receiving-roller having a dovetailed recess in its periphery and a notch formed at one side of the recess and thumb-notches formed in one face at the edges of the recess, with the dovetailed block fitting in the recess and forming a portion of the roller, as and for the purpose shown and set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

JOHN C. F. KUNKLE.

Witnesses:
WM. G. LOUDEN,
P. D. BRICKER.