

# A. Komp's Hoop Skirt Mach.

N<sup>o</sup> 64,543.

Patented May 7. 1867.

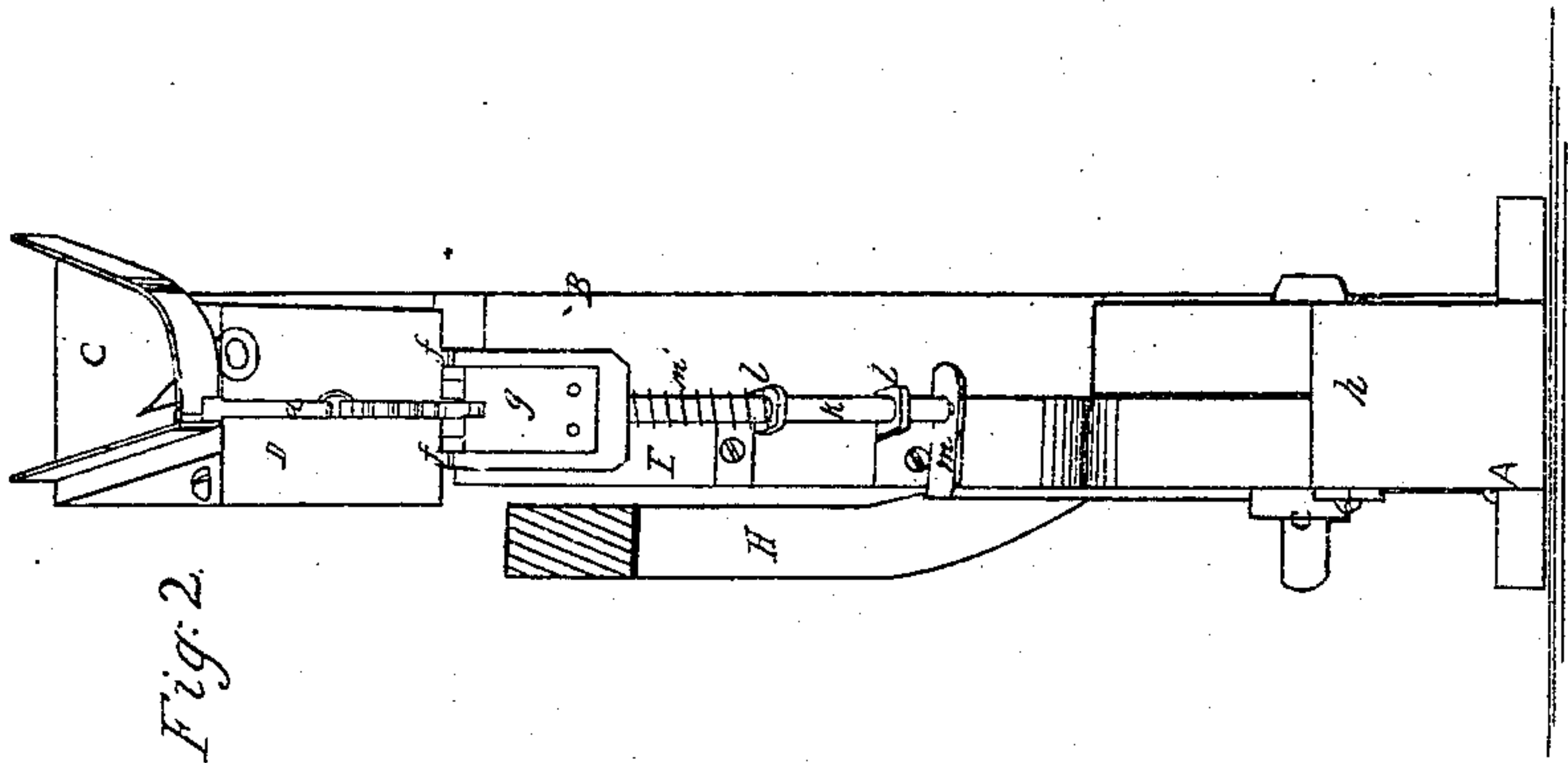


Fig. 2.

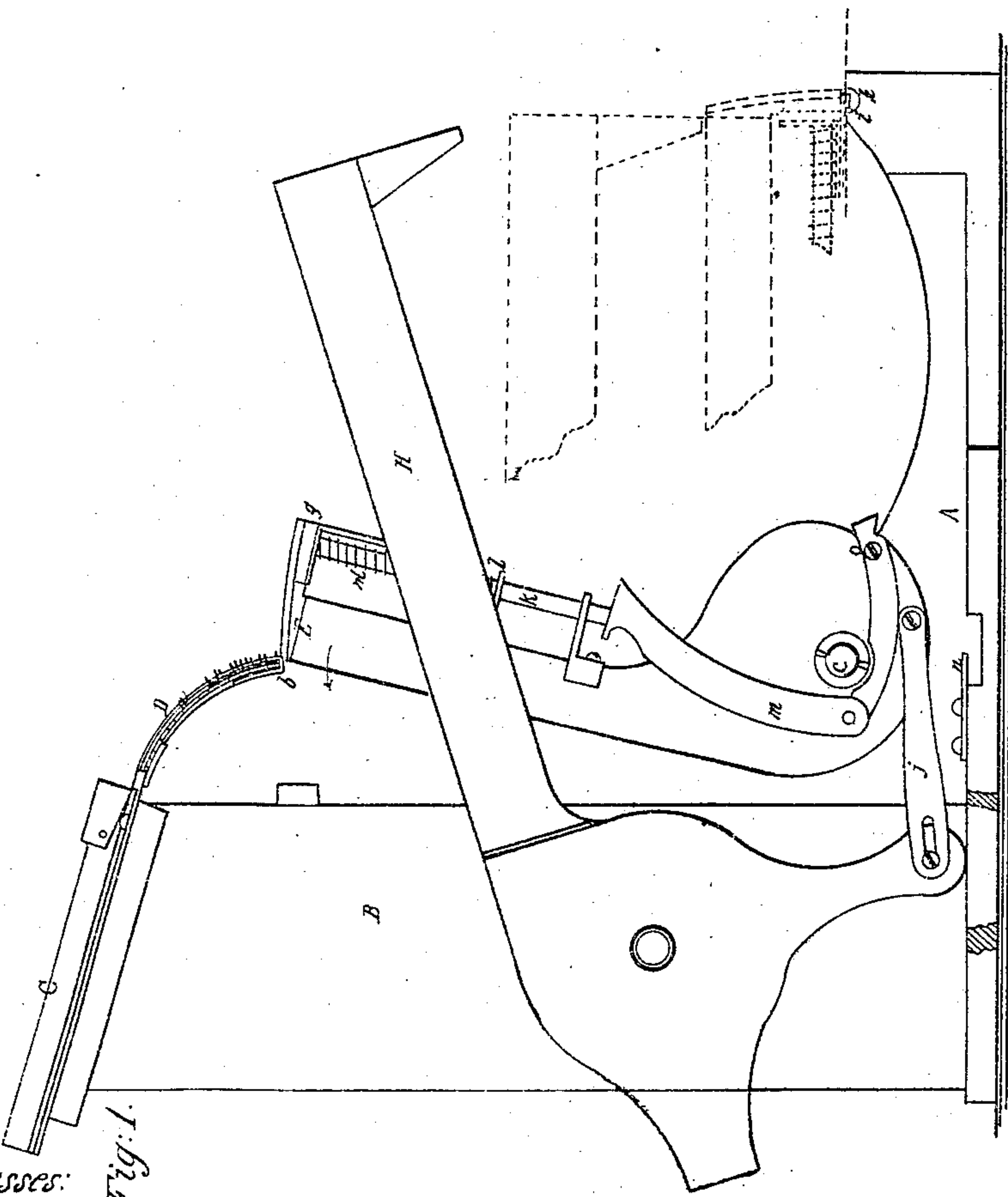


Fig. 1.

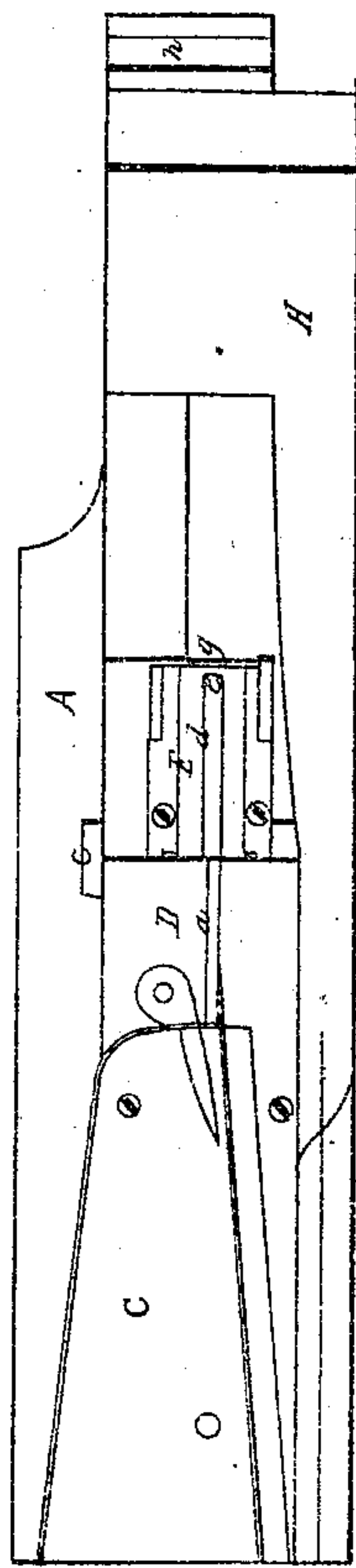


Fig. 3.

Witnesses:  
Man. Vorländer  
H. Hauff

Inventor:  
A. Komp

# United States Patent Office.

A. KOMP, OF NEW YORK, N. Y.

*Letters Patent No. 64,543, dated May 7, 1867.*

## IMPROVEMENT IN MACHINE FOR CLASPING HOOPS TO LADIES' SKIRTS.

The Schedule referred to in these Letters Patent and making part of the same.

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, A. KOMP, of No. 184 Fulton street, in the city, county, and State of New York, have invented a new and improved Spangling Machine; and I do hereby declare that the following is a full, clear, and exact description thereof, enabling those skilled in the art to fully understand and use the same, reference being had to the accompanying drawing, in which—

Figure 1 represents a sectional side elevation of this invention.

Figure 2 is a front view of the same.

Figure 3 is a plan or top view of the same.

Similar letters in these figures indicate corresponding parts.

This invention relates to a machine of that class which serves to insert and secure clasps or "spangles" in hoop-skirts, said spangles being used to secure the wires or hoops to the supporting tapes.

A represents a bed, made of cast iron or any other suitable material. From this bed rises a standard, B, which is cast solid with the same, or otherwise rigidly attached to it, and the upper edge of this standard supports the spout C, through which the spangles pass down to the spangle-guide D, the bottom of said spout being inclined, so that the spangles slide down over it by their inherent gravity, and in passing down over this inclined bottom the spangles arrange themselves so that their points are turned up and the heads or heaviest parts down. In this position they slide into the spangle-guide D, which is provided with a groove, *a*, just wide enough to admit the spangles one behind the other, the mouth of the groove *a* being closed by a spring-latch, *b*, which prevents the spangles from leaving the spangle-guide spontaneously. From the spangle-guide one spangle after the other is transferred to the spangle-carrier E, which is secured to the bed A by means of a pivot, *c*, on which it swings up and down through an arc of ninety degrees, or nearly so. The face of said spangle-carrier is provided with a groove, *d*, (see fig. 3,) which terminates at a rigid abutment, *e*, and which is just wide enough to pass over the spring-latch *b* at the mouth of the spangle-guide. In moving the spangle-carrier up in the direction of the arrow marked on it in fig. 1 until the abutment *e* at the end of the groove *d* strikes the spring-latch *b*, said spring-latch is opened, and at the same time two lips, *f*, fig. 2, projecting from the spangle-guide, press against a slotted spring-receiver, *g*, which is secured to the spangle-carrier, as seen particularly in fig. 2, and by forcing said spring-receiver back a spangle is admitted, the slot in said receiver being just deep enough to admit one spangle at a time, and not more. As soon as one of the spangles has been admitted to the spangle-carrier the motion of the same is reversed, and as the same turns down to the position shown in red outlines in fig. 1, the spangle held therein is reversed, or brought in the proper position to allow its points to penetrate the tape or other fabric placed on the anvil *h*. This anvil is provided with a semicircular groove, *i*, so that the points of the spangles are free to penetrate the tape or other fabric, and they are finally clinched by the action of the hammer H. This hammer is pivoted to the standard B, and it connects by a pitman, *j*, with the spangle-carrier E, as clearly shown in fig. 1, so that by imparting to the hammer an oscillating motion the required motion is given to the spangle-carrier. The connection between the hammer and spangle-carrier is so regulated, however, that the spangle-carrier moves down towards the anvil just far enough to bring the points of the spangles over the spot where the same are to be secured, without allowing them to penetrate the tape or other fabric, and when the hammer comes down and strikes the spangle-carrier the spring-receiver is drawn back, the spangle held by it is released, driven into the tape, and clinched. The operation of releasing the spangle from the spring-receiver *g* is effected by connecting the same to a rod, *k*, which slides back and forth in suitable guides, *l*, secured to the spangle-carrier, and which is subjected to the action of a spring, *m*, which has a tendency to close the spring-receiver, or to keep it in the position in which it is shown in fig. 1 in black outlines. The rod *k* connects with a jointed bell-crank lever, *m*, the fulcrum of which is on a pivot, *o*, and when the spangle-carrier reaches its lowest position the short arm of the bell-crank lever *m* comes in contact with a stop, *r*, and the spring-receiver is drawn back, as shown in red outlines in fig. 1.

The principal advantage of this machine over those now in use is the manner of reversing the spangles as the same are taken from the spangle-guide and brought down to the anvil. Heretofore the spangle-guide has been so formed that the spangles are reversed while passing through the guide, and in order to effect this purpose a long and curved guide is necessary, which causes many interruptions in the correct operation of the



machine. In my machine the operation of reversing the spangles is effected entirely by the motion of the spangle-carrier, and they are finally driven into the fabric and clinched by the action of the hammer, as previously described.

I disclaim everything claimed in the patents of B. A. Mann, December 24, 1861, and Joseph H. Baird, December 9, 1862; but what I do claim, and desire to secure by Letters Patent, is—

1. Reversing the spangles by the action of the spangle-carrier, substantially as shown.
2. The slotted spring-receiver *g*, in combination with the swinging spangle-carrier *E*, constructed and operating substantially as and for the purpose described.
3. The lips *f* on the spangle-guide *D*, in combination with the slotted spring-receiver *g* and oscillating spangle-carrier *E*, constructed and operating substantially as and for the purpose set forth.
4. The bell-crank lever *m* and stop *n*, in combination with the spring-receiver *g*, oscillating spangle-carrier *E*, and hammer *H*, constructed and operating substantially as and for the purpose described.

The above specification of my invention signed by me this twenty-fifth day of June, 1866.

A. KOMP.

Witnesses:

FIELELI MALLERS,  
WASHINGTON HILLS, Jr.