## I.S. Solgo, Weaving Hair.

NO. 86,872.

Falested Feb. 9. 1869.

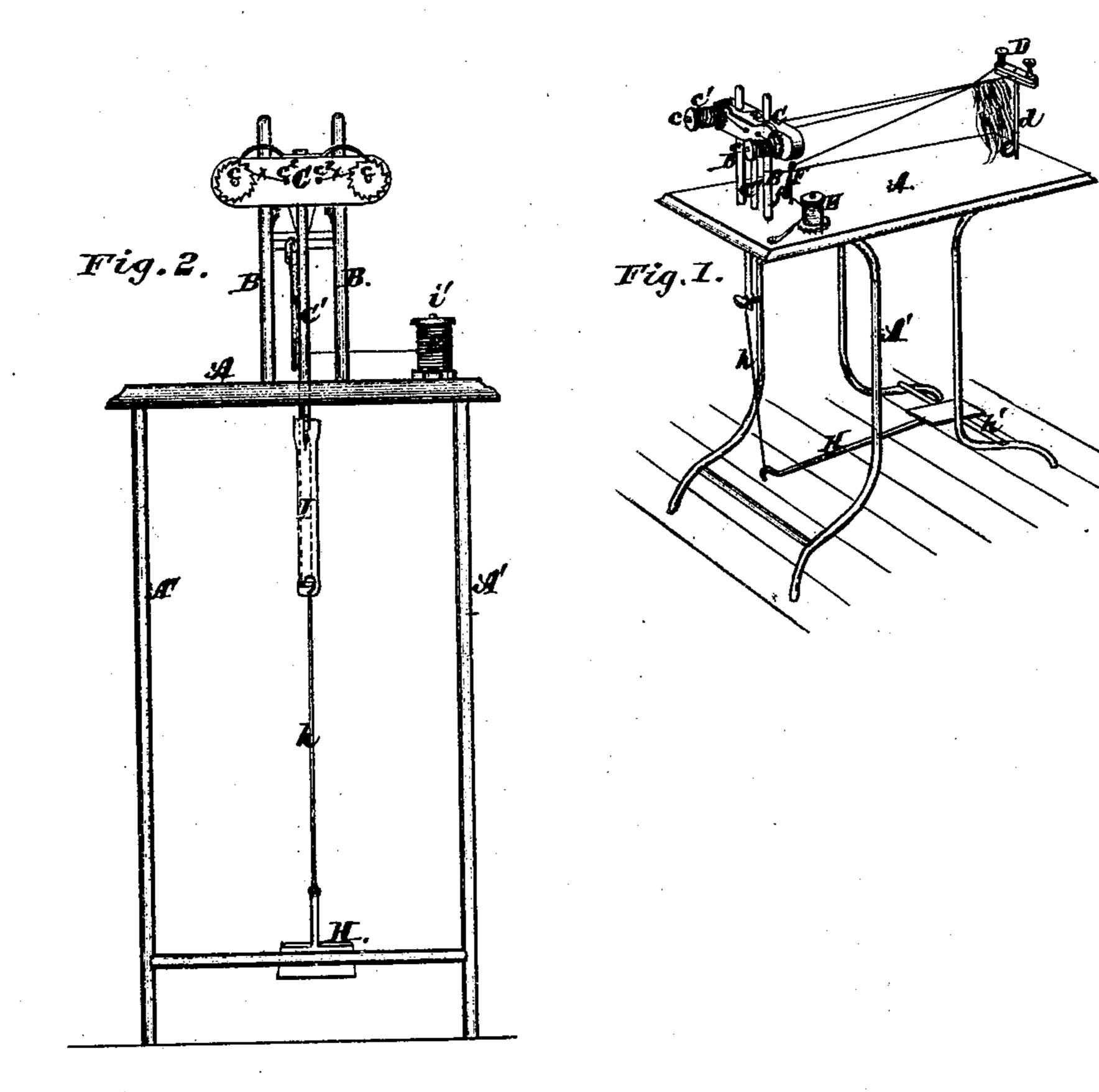
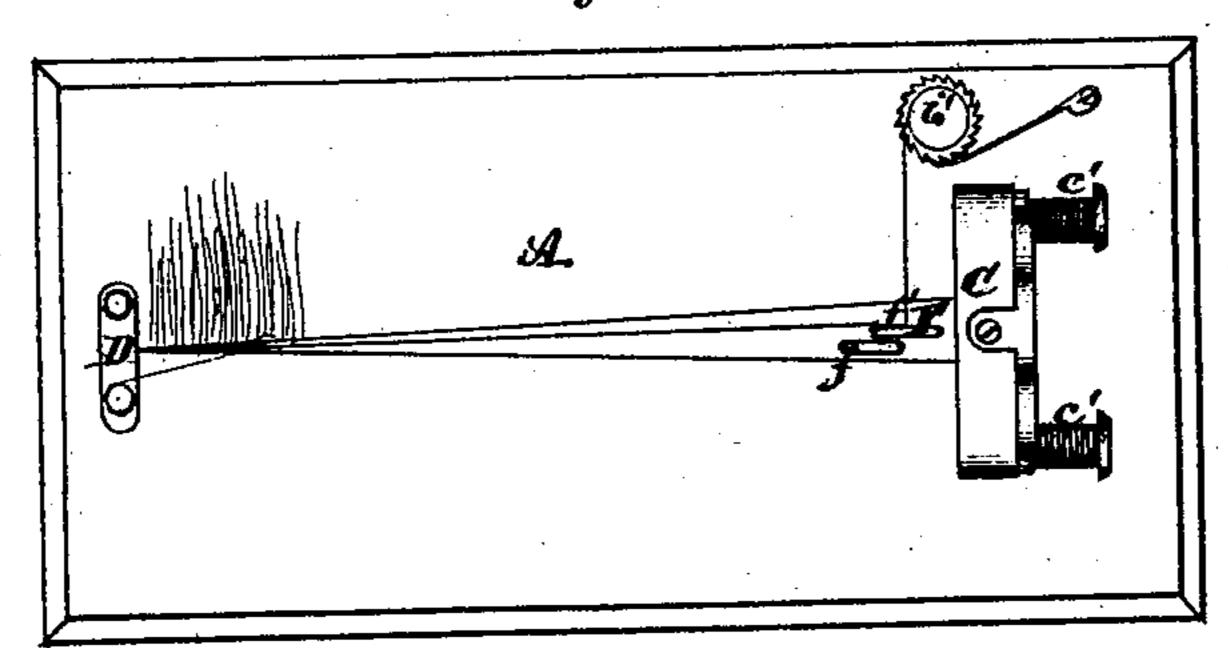


Fig.3.



Witnesses f. J. Mayers Soydia A. Leago by M. M. Beadle atty:



## LYDIA A. SEAGO, OF JERSEYVILLE, ILLINOIS.

Letters Patent No. 86,872, dated February 9, 1869.

## VEMENT IN MACHINE FOR WEAVING HAIR FOR WIGS, &c.

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, LYDIA A. SEAGO, of Jerseyville, in the county of Jersey, and State of Illinois, have invented a new and useful Machine for Weaving Hair; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This invention relates to a machine for weaving hair for ladies' switches, or chignons, and consists mainly in the combination of a vertically-sliding block, carrying the weaving-threads, with a stud and spring-standard holding the stationary thread, the two being used in connection with a spring-clamp, which holds the fixed ends of the threads.

It also consists in certain details of construction, which, with the foregoing, will be fully described hereinafter.

In the drawings—

Figure 1 represents a perspective view,

Figure 2, a side elevation, and

Figure 3, a plan view of my invention.

To enable others skilled in the art to make and use my invention, I will now proceed to describe its construction and mode of operation.

A represents a table, similar to that of a sewingmachine, which is supported in the usual manner by

the standards A'.

Located near the rear of this table, on the top side, are two vertical guide-rods, B B, upon which slides a block, C, having a stud or pin, c, at each end, upon which latter turns a spool or roller, c', which holds the thread, silk, or wire, with which the hair is to be woven.

The thread x, upon these spools, passes through two small holes,  $c^2$   $c^2$ , near the centre of the sliding block C, and is secured near the front of the machine by a clamp, D, the use of which will be fully described hereinafter.

At the left side of the table is a third spool or roller, E, turning upon a stud, i', similar to the two on the

sliding block C.

The thread from this spool passes through an eye, f, in the lower part of the vertical spring-standard F, near the sliding block C, thence through another eye, f', at the top, and from there to the clamp D, at the front of the machine.

The threads are drawn up to the required tension by turning the spools, which are secured in the proper position by the ratchets on their flanges, as clearly

shown in the drawings

In the lower side of the sliding block C is secured a rod, C', which passes through a hole in the table, and is connected by a rod, h, or other suitable means, with the pedal H, which works upon a hinge on the front cross-bar h' of the table-standards.

At the under side of the table, near where the rod passes through, is a spring, I, the upper end of which

is attached to the table, and the lower end to the rod h. This spring may be made of India rubber, or of any other suitable material, and of any convenient form.

The operation of this machine is as follows:

The weaving-threads being drawn up to the proper tension, and the sliding block being lifted by the spring to the upper extremity of its stroke, a slip of hair is passed horizontally between the two upper threads and the central one, and pressed as near as possible to the clamp, which holds the ends of the weaving-thread. The pedal is then pressed down by the foot of the operator. This brings the two outside threads below the central one. The end of the slip of hair, which was passed through while the outer threads were raised, is now turned and brought back between the threads again, while they are in this position. The pedal is then raised. A fourth thread is now passed over the slip of hair, between the centre threads and one of the side threads, alternately upon each side, which, being tightly drawn, completes the weaving.

This latter operation follows the insertion of each

slip of hair.

The clamp for holding the threads at the point where they meet, it will be observed, is so constructed that when a certain length of work has been completed, the upper plate can be removed and the work be drawn over, and again secured in the proper position.

It will be observed that the standards for the clamp and centre thread are springs, which are so constructed that they may yield to the vertical motion of the sliding block, thus preserving a uniform tension of weaving-thread.

This machine may be made, if required, without the standards, so that it may be clamped to the top of an

ordinary table.

Having thus fully described my invention,

What I claim, and desire to secure by Letters Pat-

ent of the United States, is-1. The sliding block C, moving upon the vertical

guide-rods B B, and having studs c c, and spools c1 c,1 when arranged substantially in the manner described, for the purpose set forth.

2. The clamp D, with spring-standard d, when constructed in the manner described, for the purpose set

forth.

3. The hair-weaving machine described, consisting of the sliding block C, rod C', pedal H, standard F, clamp D, and spools  $c^1 c^1 e$ , when constructed substantially as described and used in connection with threads, for the purpose set forth.

This specification signed and witnessed, this 16th day of December, 1868.

LYDIA A. SEAGO.

Witnesses:

V. WIESONER, T. F. REMER.