

(No Model.)

W. C. HARRISON.

HAND POWER FOR SEWING AND OTHER MACHINES.

No. 330,021.

Patented Nov. 10, 1885.

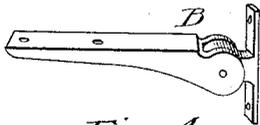
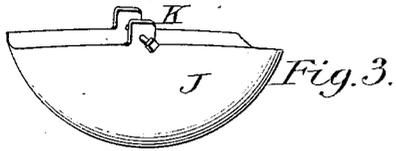


Fig. 4.

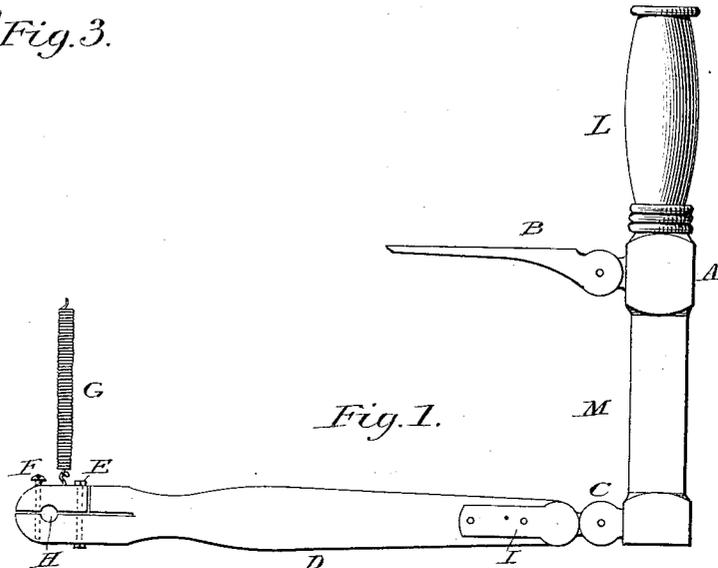
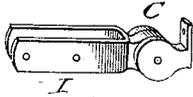


Fig. 1.

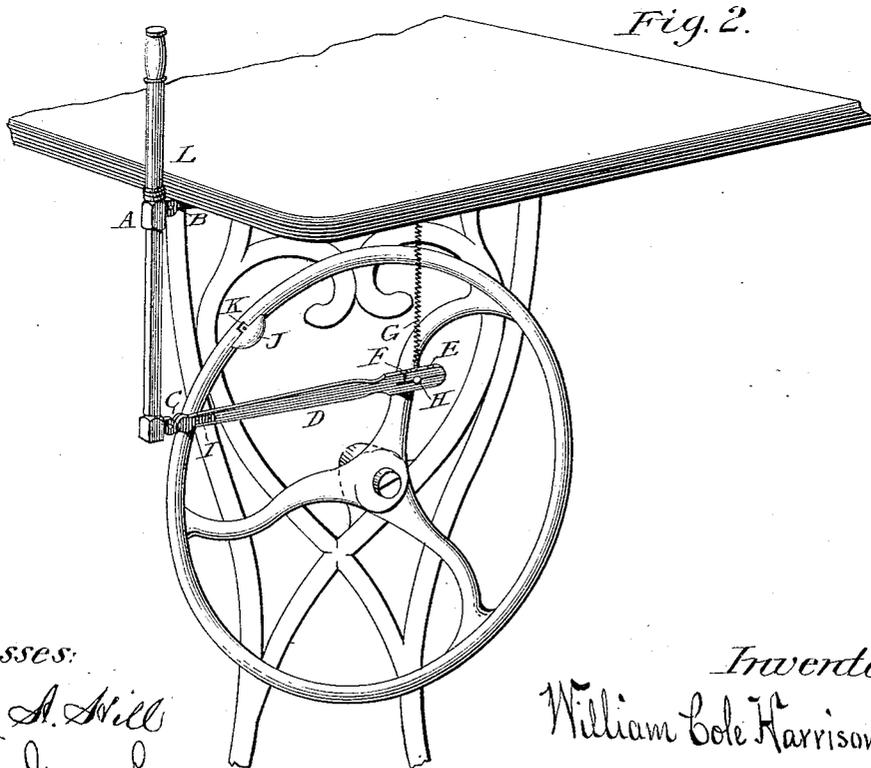


Fig. 2.

Witnesses:

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UNITED STATES PATENT OFFICE.

WILLIAM COLE HARRISON, OF NEW ORLEANS, LOUISIANA.

HAND-POWER FOR SEWING AND OTHER MACHINES.

SPECIFICATION forming part of Letters Patent No. 330,021, dated November 10, 1885.

Application filed August 25, 1885. Serial No. 175,337. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM COLE HARRISON, a citizen of the United States, residing at the city of New Orleans, in the parish of Orleans and State of Louisiana, have invented a new and useful Improvement in Hand-Powers for Sewing and other Machines, of which the following is a specification.

My invention relates to an improvement in operating sewing-machines and other machines by hand.

The object of my improvement is—

First. To do away with the foot or treadle motion entirely, thereby relieving woman from the motion most injurious to her urinary and genital organs, which injury disastrously affects her entire system. It is a well-known fact that the unnatural motion of the feet on a treadle contributes more to destroy the health of women than all the other work they perform, and the sewing-machine is universally denounced by the medical profession on that account. My invention is a remedy for the trouble, and will prove a relief and cure to thousands of women whose very existence is now a source of misery to them.

Second. There can come no possible injury from the use of my invention. It is simply a wrist and forearm motion, calculated to develop the muscle without any manner of injury to the body, thereby will prove a blessing to the human race.

Third. Twice as much sewing can be done in a given time with my invention as by the treadle, because of the much more rapid running of the machine. The machine runs easier and steadier, and does better sewing than by the treadle motion.

Fourth. The spring and weight reduce the power necessary to run the machine to almost nothing, and also prevent the wheels from stopping on the center, the machine can be started at once without the bother of turning fly-wheel with the hand.

Fifth. With my invention a small child can run a sewing-machine.

My invention can be used on any light-running treadle-machine with advantage to the operator in ease and rapid motion.

Figure 1 in drawings shows my invention, side view, lying on flat surface. Fig. 2 shows

the manner in which it is attached to a machine for use.

Similar letters refer to similar parts in all the Figs. 1, 2, 3, and 4.

My invention consists of lever A, of wood or other material, to be attached to the under side of the table of machine, either front or back, by a metal hinge. Said lever is connected with arm D, of wood or other material, by a metal hinge. Arm D connects directly to or on the crank-pin on the driving-wheel of machine. A spring, G, of spiral wire or other material, is attached to arm D, near crank-connection H, and also to the under side of the table of machine, by or with small screw-eyes or other method. Arm D has a split through hole H, and a section cut out and secured in place with tap-bolt E. This is done in order to attach arm D easily to all styles and makes of machines. Screw F holds split ends of arm D firmly together when on machine.

Fig. 3 shows a small weight, J, six to eight ounces, or more, of metal or other material, with set-screw K to attach it to driving-wheel of machine to load same. Fig. 4 shows top view of hinges B and C.

Lever A is made of turned wood or material, and is about fourteen inches long, and at the square part, to which hinge B fastens, is about one inch square, and tapers to about three-fourths of an inch at lower end, to which hinge C is attached. A little more than one-half of lever A extends above the table. Hinge B is made from my own patterns, weighs about four ounces, with jaws of sufficient size and strength to prevent lateral motion, and is about three inches long, three-fourths wide, with three holes for screws to secure it firmly to table. The tongue of hinge that works in the jaws is about seven-sixteenths inch thick, by one-half inch diameter, and secured between jaws by a three-sixteenth-inch bolt of iron. Hinge C secures lever A to arm D; is likewise from my patterns, and similar to hinge B in the joint, but much lighter, weighing about one and one-half ounce, and has side bars, I, into which is secured the end of arm D by means of small pins, rivets, or screws. Arm D is made quarter-turned, wood or other material, with

flat sides; is about one-half inch thick by one inch wide, and about fourteen inches long; has hole H, of size to fit crank-pin on wheel; is split about three inches by sawing
 5 through center of hole H. A section is cut out by sawing through half of arm D, about three-fourths of an inch from hole H. Said section is secured firmly in place by a metal bolt, E, with tap. Screw F holds end of arm
 10 D in place when on crank. Spring G is of spiral wire or other material, is attached to arm D near hole H, and to the under side of the table of machine by small screw-eyes or other means. Weight J, Fig. 3, is of metal
 15 or other material, weighs six to eight ounces, or more, and is shaped to fit the rim of wheel, with jaws to span side of wheel, and a set-screw, K, to fasten firmly to wheel to load same.

20 My invention can be attached to the back or front of machine and be run by an assistant, and can be used on all light-running or treadle machines by accommodating length of arm D.

25 My invention is operated by placing right

hand on lever A at letter L and pushing lever forward and backward, stroke being about four inches. It may be operated almost, if not quite, as well by placing hand on lever A at letter M. One hand is free to guide and care
 30 for the work as it passes to the needle, and one hand is all that is necessary for that purpose.

I claim as my invention and desire to secure by Letters Patent—

The combination described as the hand-
 35 power for operating sewing-machines and other light-running machines, consisting of a lever, A, connected to arm D by means of hinges C, said arm D cut and secured by tap-
 40 bolt E, and attached directly to or on the crank-pin of the driving-wheel of machine, the spring G, and the weight J, with set-screw K, for fastening weight to wheel at proper point to load same, all as substantially and fully set forth.

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Witnesses:

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