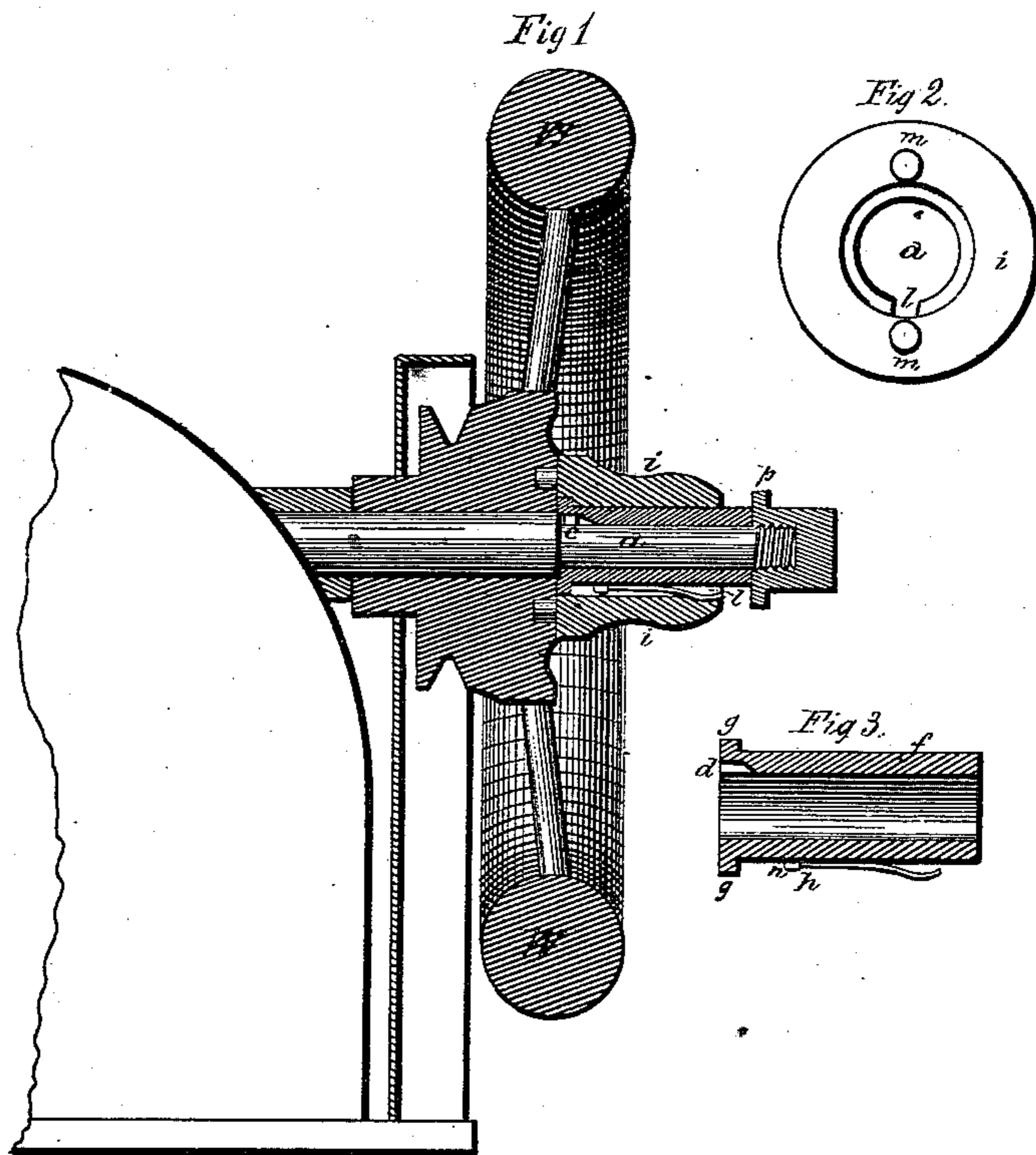


H. B. WEILAND.
Sewing-Machine.

No. 161,310.

Patented March 23, 1875.



WITNESSES.

J. W. L. Lerner,
C. W. Lerner.

INVENTOR.

H. B. Weiland
per J. A. Lehmann atty

UNITED STATES PATENT OFFICE.

HARRY B. WEILAND, OF MARTINSBURG, WEST VIRGINIA.

IMPROVEMENT IN SEWING-MACHINES.

Specification forming part of Letters Patent No. **161,310**, dated March 23, 1875; application filed February 16, 1875.

To all whom it may concern:

Be it known that I, HARRY B. WEILAND, of Martinsburg, in the county of Berkeley and State of West Virginia, have invented certain new and useful Improvements in Sewing-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in sewing-machines; and consists in an arrangement and combination of parts, by which the wheel on the end of the shaft of a sewing-machine can be thrown out of gear, to revolve loosely on the shaft without operating the needle-bar or other parts of the machine, for the purpose of winding the bobbin, and again thrown in gear to operate the machine, as will be more fully described hereafter.

The accompanying drawings represent my invention.

a represents an extension on the end of the shaft of a sewing-machine, beginning at the seat of the balance-wheel *W*, and is of less diameter than the shaft. Upon the extension *a*, touching the shoulder formed by the decreased size of the extension and the shaft, is a stop, *c*, which enters into the groove *d* inside the ferrule or sleeve *f*, placed upon the extension *a*. This sleeve has, at one end, a flange, *g*, which presses against the wheel to hold it in place. On the outside of the sleeve *f*, in front of the flange *g*, is secured one end of the spring *h*, which spring extends to the outer end of the sleeve, where it is bent upward for the purpose of holding the knob *i*, which is placed over the sleeve *f*, and of preventing it from leaving the position in which it may be placed. Between the spring *h* and the flange *g* is a pin or stop, *n*, which keeps the knob *i* from turning around upon the

sleeve. Inside of the knob *i* is a groove, *l*, to admit the spring *h* and pin *n*, the bent end of the spring passing entirely through to the outer end of the knob and holding it. The knob *i* has, on its enlarged rear end, where it touches the wheel, the pins *m*, which enter into corresponding holes in the hub of the wheel, whereby the wheel, knob, and shaft are made to turn together, and the shaft operate the needle-bar.

When it is desired to throw the wheel out of gear, so as to make it revolve independently for the purpose of winding a bobbin, the knob *i*, which acts as a clutch, is drawn away from the wheel against the flange on the nut *p*, which nut is held by either a right or left hand thread upon the end of the extension *a*. By this movement the pins *m* are drawn out from the holes in the wheel, and the connection between the shaft and wheel is broken, and the latter runs independently without operating the needle-bar.

The spring *h* holds the knob, so that, whether it be pushed against the wheel or drawn away from it, it cannot leave its position until moved by hand.

This improvement may be applied to new machines by making the shaft and extension in one piece, and can be adapted to others by adding the extension to the shaft upon which to place the device.

Having thus described my invention, I claim—

The combination of the extension *a*, pin *c*, the sleeve *f*, provided with the slot *d* and spring *h*, and pin *m*, the nut *p*, and the knob *i*, substantially as shown and described.

In testimony that I claim the foregoing I have hereunto set my hand this 8th day of February, 1875.

HARRY B. WEILAND.

Witnesses:

F. A. LEHMANN,

J. WILLIAM GARNER.