

D'A. PORTER & G. W. BAKER.

SEWING-MACHINE.

No. 174,703.

Patented March 14, 1876.

Fig. 1

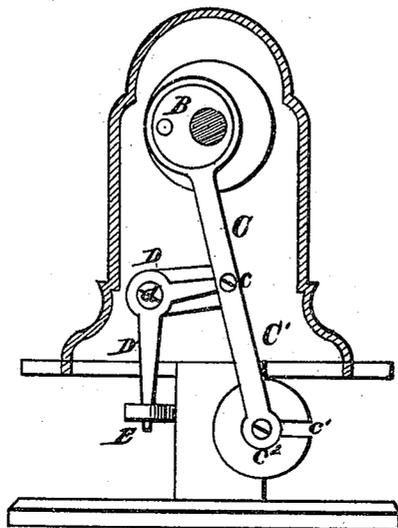
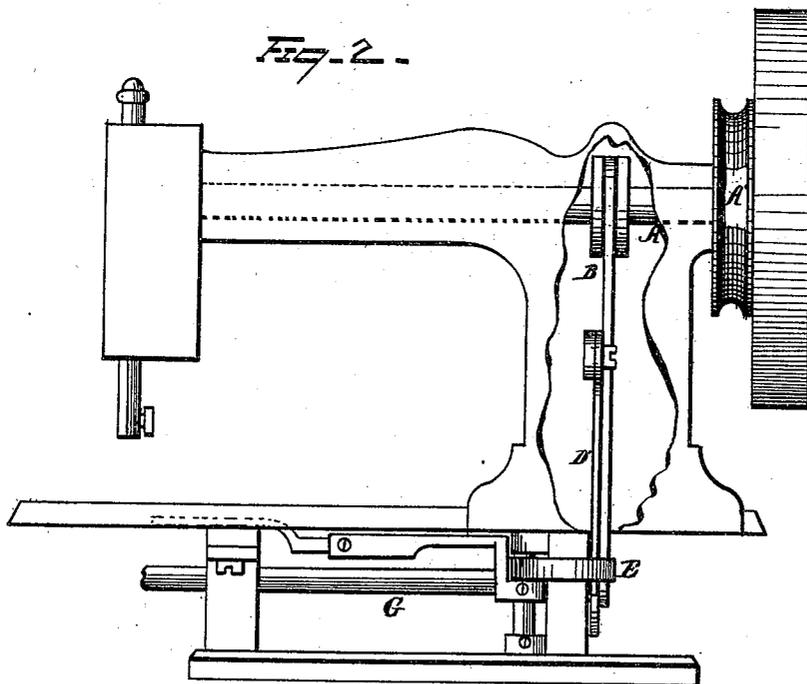


Fig. 2



WITNESSES

E. A. Nottingham
Harold G. Underwood BY

INVENTOR

D. A. Porter
G. W. Baker
Ben. Leavitt & Leggett, Attorneys.

UNITED STATES PATENT OFFICE

D'ARCY PORTER AND GEORGE W. BAKER, OF CLEVELAND, OHIO.

IMPROVEMENT IN SEWING-MACHINES.

Specification forming part of Letters Patent No. **174,703**, dated March 14, 1876; application filed February 1, 1876.

To all whom it may concern:

Be it known that we, D'ARCY PORTER and GEORGE W. BAKER, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Sewing-Machines; and we 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:

Our invention relates to an improvement in sewing-machines.

In the drawings, Figure 1 is a front elevation of our said improvement as adapted to sewing-machines; Fig. 2, a side elevation of the same.

Our invention consists in the following parts and combinations, as hereinafter specified and claimed, wherein A is the main shaft of a sewing-machine, upon which is usually placed the governing and belt wheel A'. B is an eccentric placed upon the main shaft A for operating the connecting-arm C C'; said connecting-arm is pivoted at *c* to the elbow or angle piece D D'. At or near the extremity of the portion C' of the connecting-arm is provided a lug, or its equivalent, *c'*, which operates in and serves to revolve the slotted disk C² of the feed-shaft G. The angle-piece D D' is pivoted to the frame of the machine at *d*; its arm D is pivoted to the connecting-arm C C' at *c*, while its arm D' is suitably connected to the shuttle-arm E in such a manner as to impart to the said arm its reciprocating motion.

Operation: The connecting-arm C C', through

the agency of the eccentric B, imparts an oscillating movement to the arm D. This swinging arm D, and its connection with the crank or slotted disk C², or its equivalent, imparts a rotary motion to the feed-shaft G equal to that of the main shaft A, though in an opposite direction thereto, while at the same time, by its connection *c*, the arm C C' imparts an oscillating motion to the elbow or angle piece D D', which is rigidly pivoted at its angle to the frame of the machine. The opposite end of the elbow, being connected with the shuttle-arm E, imparts a reciprocating motion to the said shuttle-arm.

What we claim is—

1. In combination with connecting-rod C C', the elbow or angular lever D D' and the shuttle-arm E, whereby a reciprocating motion is imparted to the said shuttle-arm, substantially as shown.

2. In combination with the main shaft A, feed-shaft G, and shuttle-arm E, the connecting-bar C C' and elbow or angular piece D D', substantially as shown, whereby the rotary motion of the main shaft A imparts an equal and opposite rotary motion to the feed-shaft G, and a reciprocating motion to the shuttle-arm E, substantially as and for the purpose shown.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

D'ARCY PORTER.
GEORGE W. BAKER.

Witnesses:

FRANCIS TOUMEX,
JAMES P. WALSH.