

No. 657,680.

Patented Sept. 11, 1900.

W. SHAW.
SEWING MACHINE.

(Application filed June 8, 1899.)

(No Model.)

2 Sheets—Sheet 1.

Fig. 1.

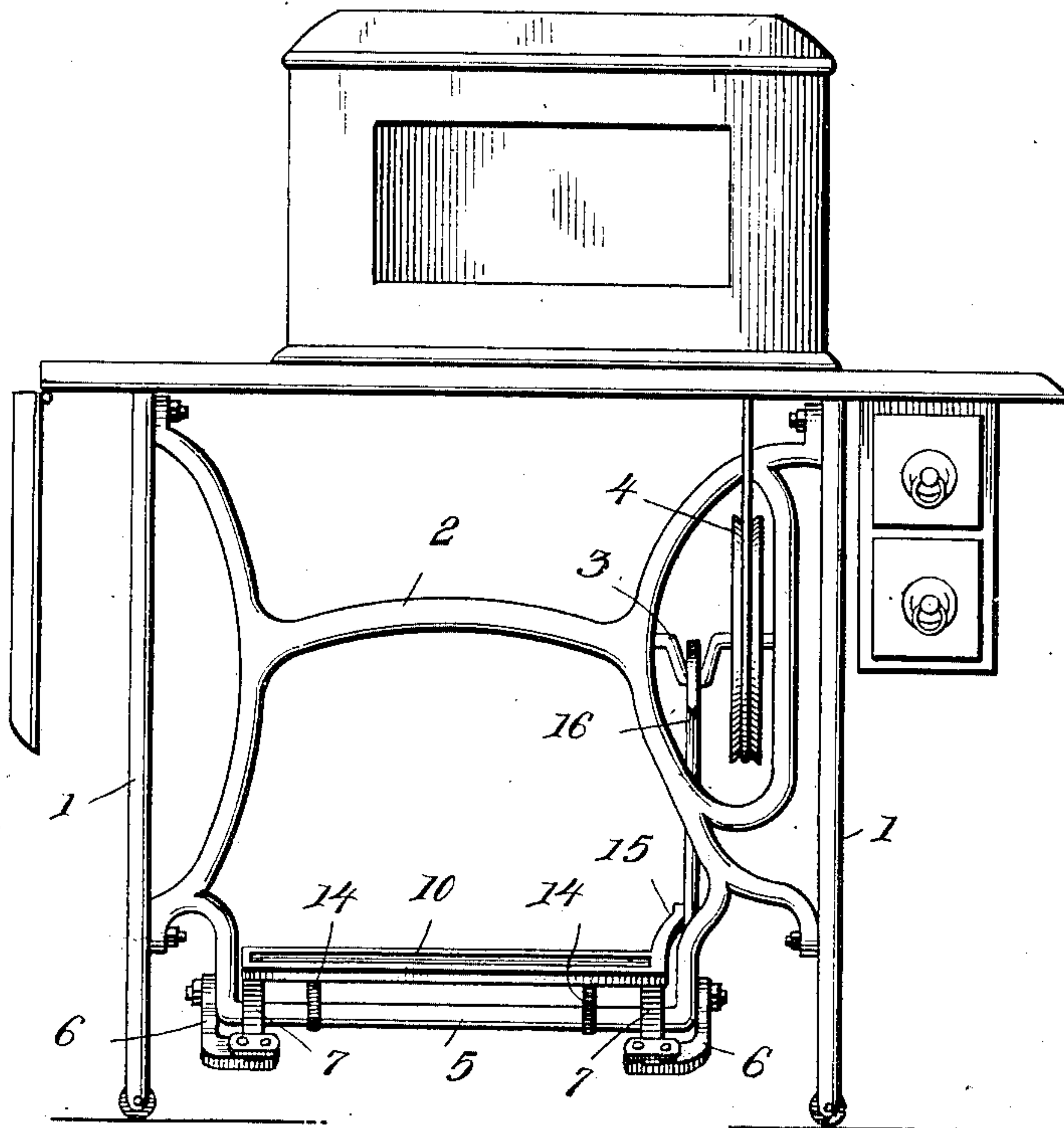
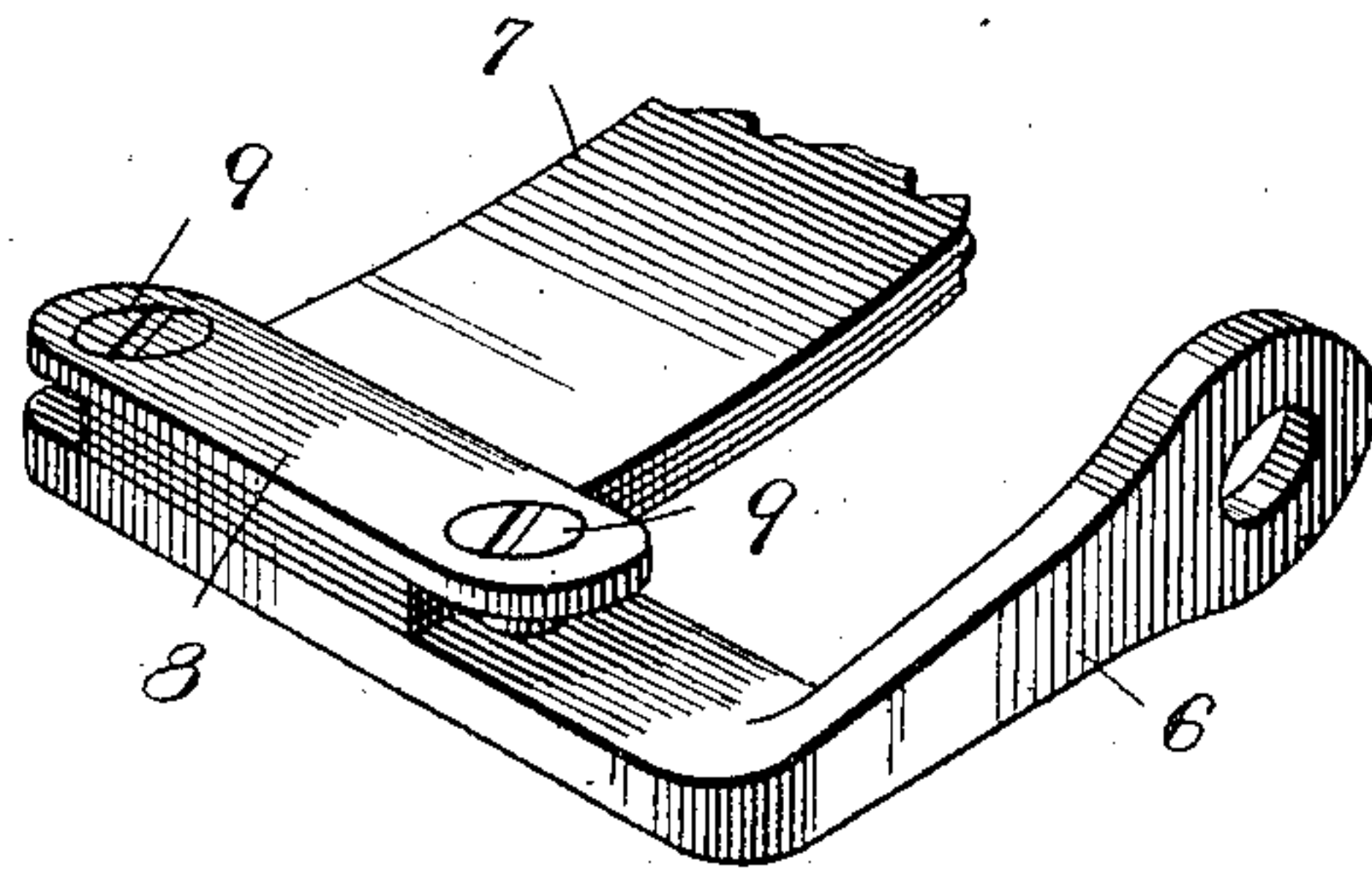


Fig. 2.



Witnesses
W. O. Rely,
Herbert W. Lawson

Inventor
William Shaw,
By *Victor J. Evans.*
Attorney

No. 657,680.

Patented Sept. 11, 1900.

W. SHAW.
SEWING MACHINE.

(Application filed June 8, 1899.)

(No Model.)

2 Sheets—Sheet 2.

Fig. 3.

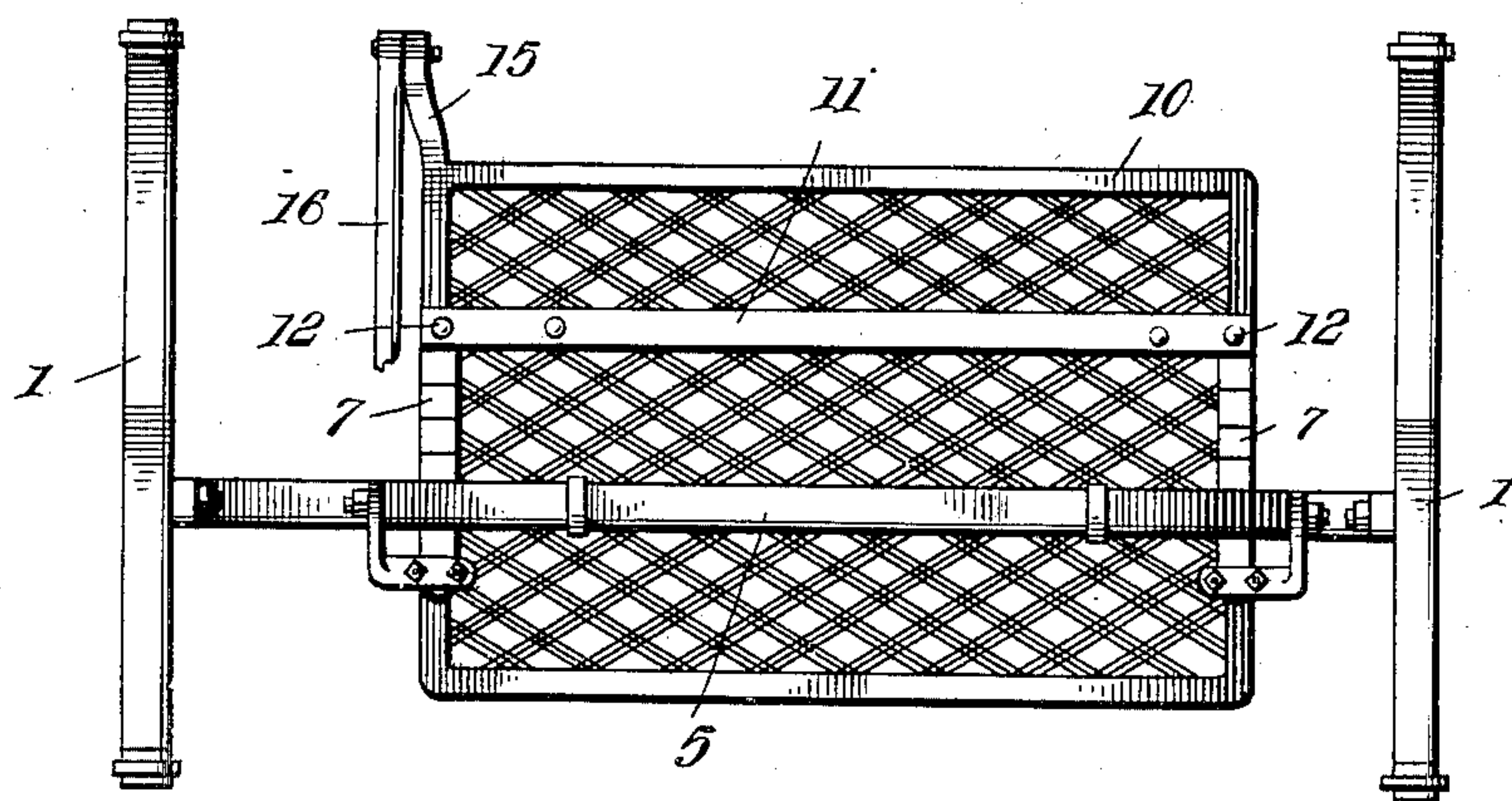
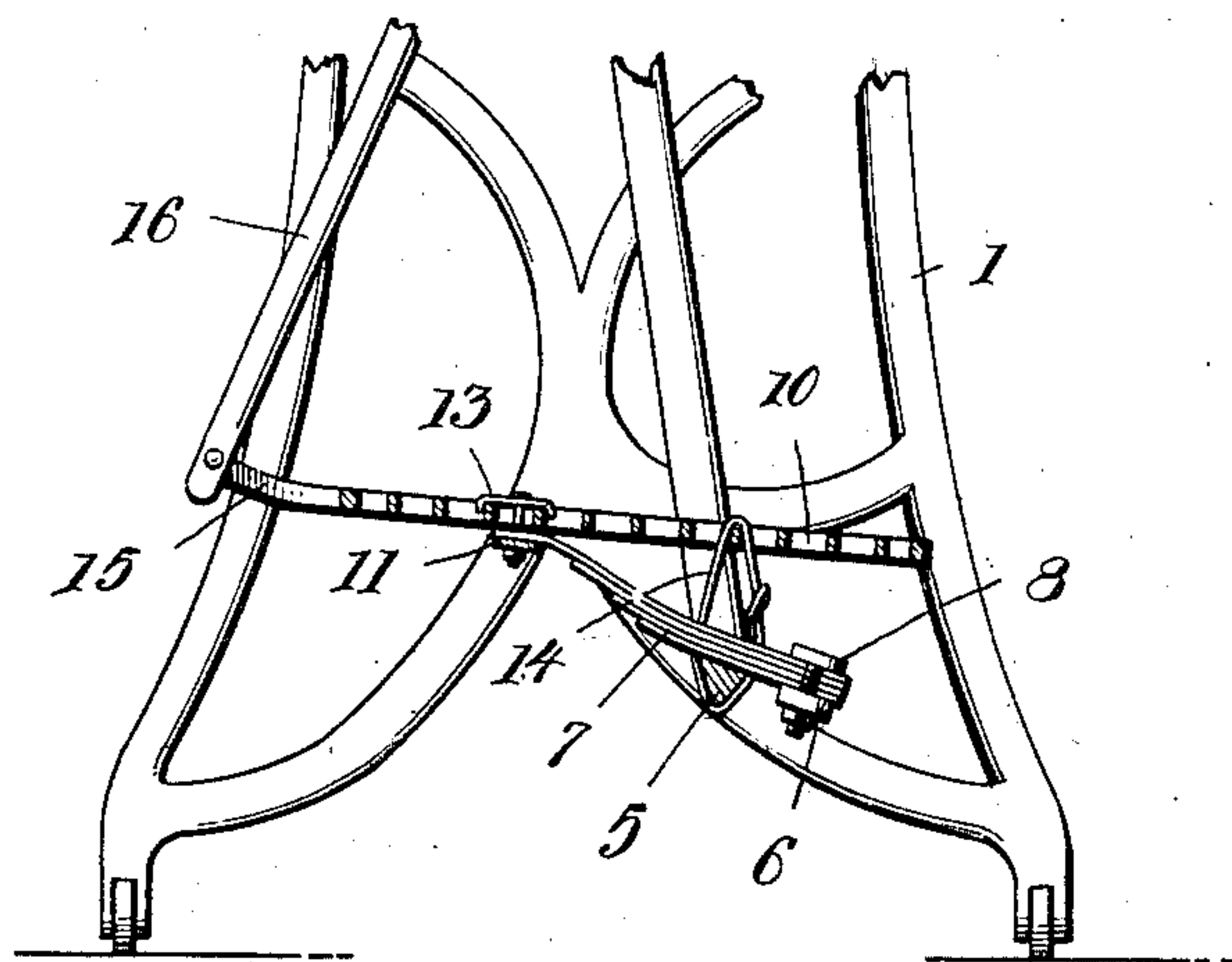


Fig. 4.



Witnesses
H. B. Riley,
Herbert D. Lawson

Inventor
William Shaw,
By *Victor J. Evans,*
Attorney

UNITED STATES PATENT OFFICE.

WILLIAM SHAW, OF RAPID CITY, SOUTH DAKOTA.

SEWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 657,680, dated September 11, 1900.

Application filed June 8, 1899. Serial No. 719,824. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM SHAW, a citizen of the United States, residing at Rapid City, in the county of Pennington and State of South Dakota, have invented certain new and useful Improvements in Spring-Treadles for Sewing-Machines or other Foot-Power Machines; and I do 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 appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in foot-power machines, and more especially sewing-machines, &c.; and its primary object is to provide a spring-support for the treadle, which thereby avoids the use of ordinary bearings.

A further object is to provide a device of this character whereby a smooth, easy, and regular action is obtained.

To these ends the invention consists in the novel construction and combination of parts hereinafter more fully described and claimed and illustrated in the accompanying drawings, showing the preferred form of my invention, and in which—

Figure 1 is a front elevation thereof applied to a sewing-machine. Fig. 2 is a detailed view showing the means for attaching the spring to the bracket. Fig. 3 is a bottom plan view of the treadle, and Fig. 4 is a transverse section through the treadle.

Referring to said figures by numerals of reference, 1 1 are the standards of the sewing-machine, to which is secured a casting 2 of ordinary construction and within which is journaled the crank-shaft 3 of the wheel 4. The casting is provided at the bottom with a cross-strip 5, to the ends of which are secured forwardly-extending brackets 6. Secured to the free end of each bracket is one end of a leaf-spring 7 of any suitable construction. This spring is preferably secured to said bracket by means of a plate 8, which rests thereon and is connected to the bracket by means of bolts or screws 9, as shown. Each of these springs is secured at its forward end to the treadle 10 at a point preferably between the center and the rear edge thereof. A cross-strip 11 extends longitudinally of the treadle and bolts 12 pass therethrough and

through the ends of the springs 7 into engagement with a plate 13 upon the upper surface of the treadle. Straps 14 of leather or other suitable material bind the treadle to the cross-strip 5, thereby limiting the upward movement of said treadle and permitting a steady motion thereof. An arm 15 extends from the rear end of the treadle and is connected by means of a pitman 16 to the crank-shaft 3.

When the treadle is depressed by the toe of the foot, it will be seen that as the brackets are stationary the springs 7 will bend downward, carrying the pitman therewith, and the recoil thereof will facilitate the upward movement of the pitman. It is obvious that when the pitman and the crank are on a "dead-center" the machine may be readily started by pressing upon the treadle, which will cause the same to swing slightly forward.

By this construction, as before stated, the friction-bearings commonly employed in treadles are dispensed with.

In the foregoing description I have shown the preferred form of my invention; but I do not limit myself thereto, as I am aware that modifications may be made therein without departing from the spirit or sacrificing any of the advantages thereof, and I therefore reserve the right to make all such changes as fairly fall within the scope of my invention.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with standards, of a cross-strip therebetween, brackets extending from the cross-strip, leaf-springs secured at one end to the brackets, a treadle secured to the opposite ends of the springs, and straps connecting the treadle to the cross-strip and adapted to limit the upward movement of said treadle.

2. The combination with standards, of a cross-strip therebetween, brackets projecting from said strips, clamps thereon, springs held at their front ends by said clamps, a treadle secured to the rear ends of said springs, a strip connecting said springs at their rear ends, and straps connecting the treadle to the cross-strip.

In testimony whereof I have affixed my signature in presence of two witnesses:

WILLIAM SHAW.

Witnesses:

SAM J. DAY,
CASSIUS M. LEEDY.