

(No Model.)

J. R. WEAVER.
SEWING MACHINE BRAKE.

No. 601,692.

Patented Apr. 5, 1898.

FIG. 1.

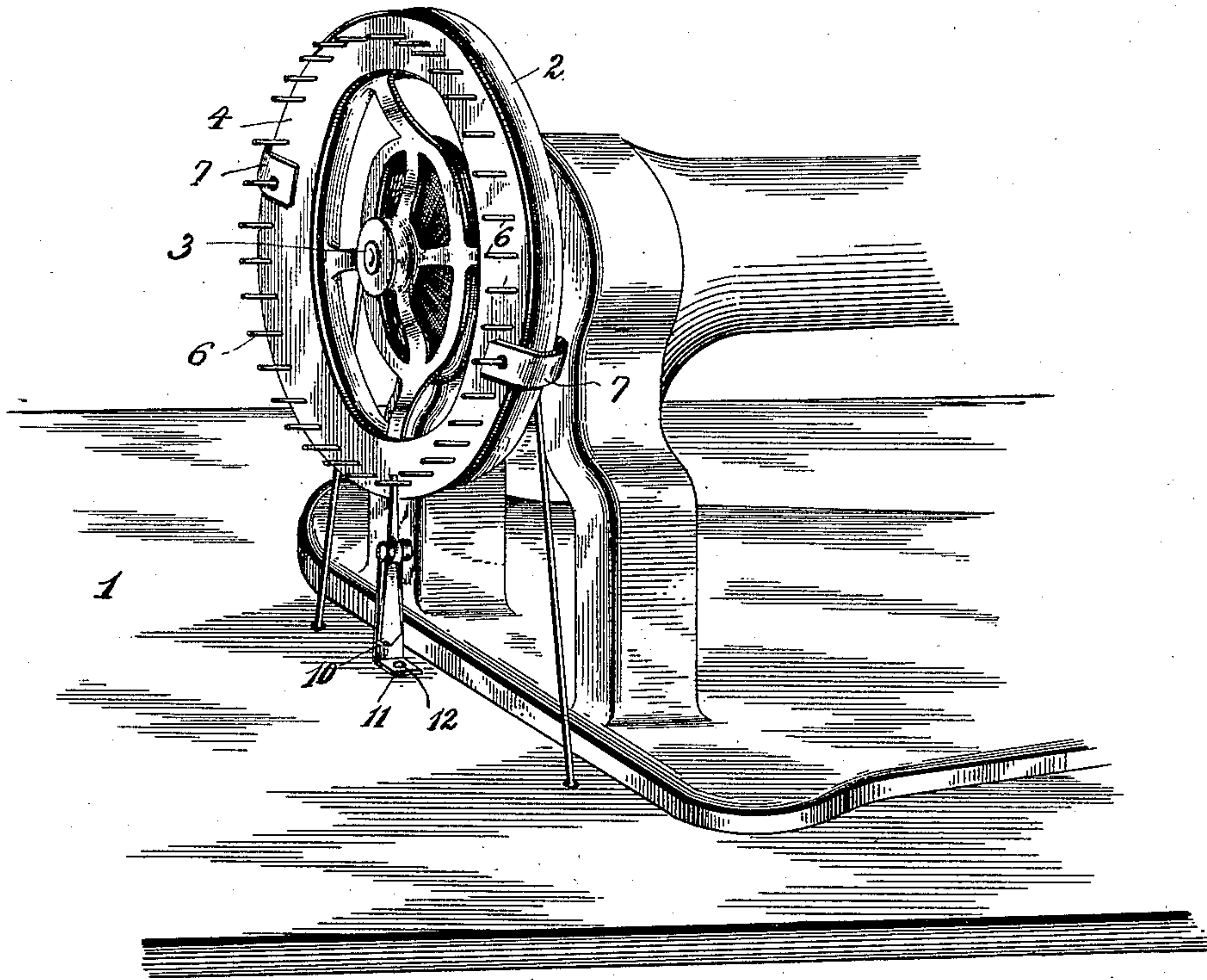


FIG. 2.

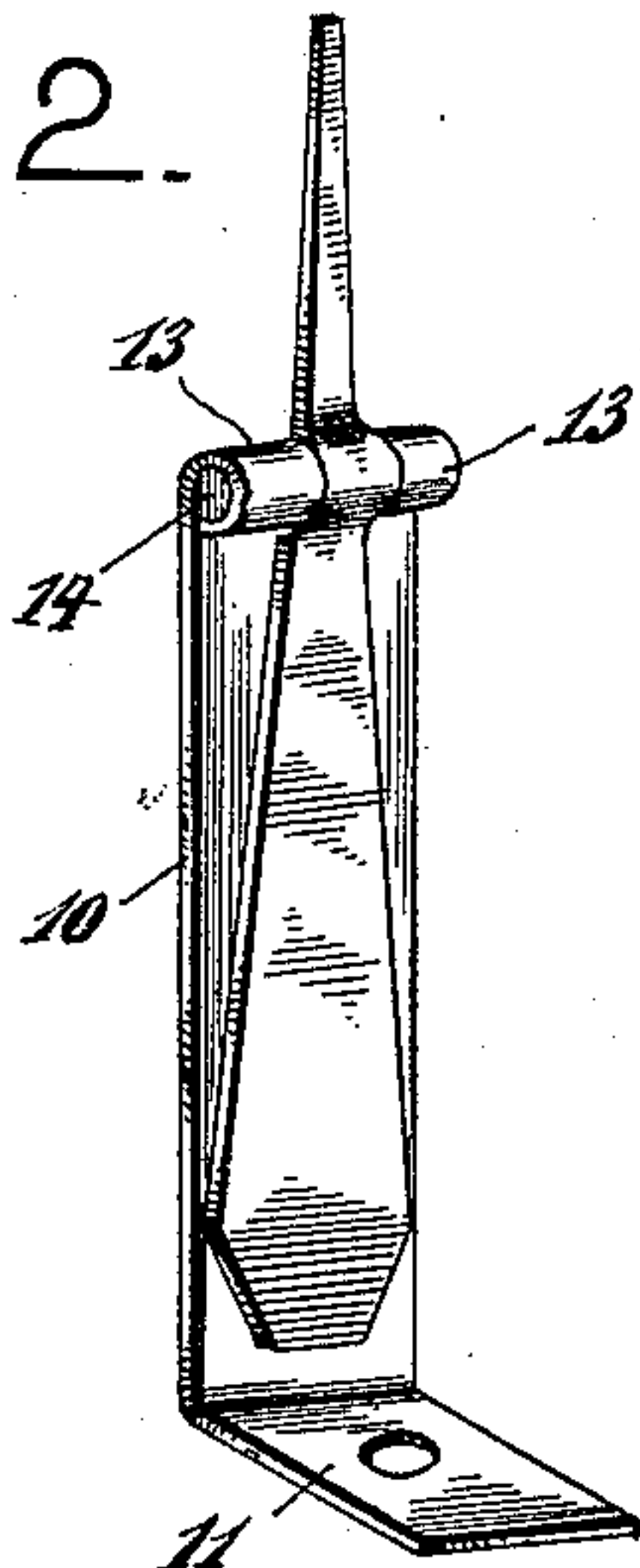
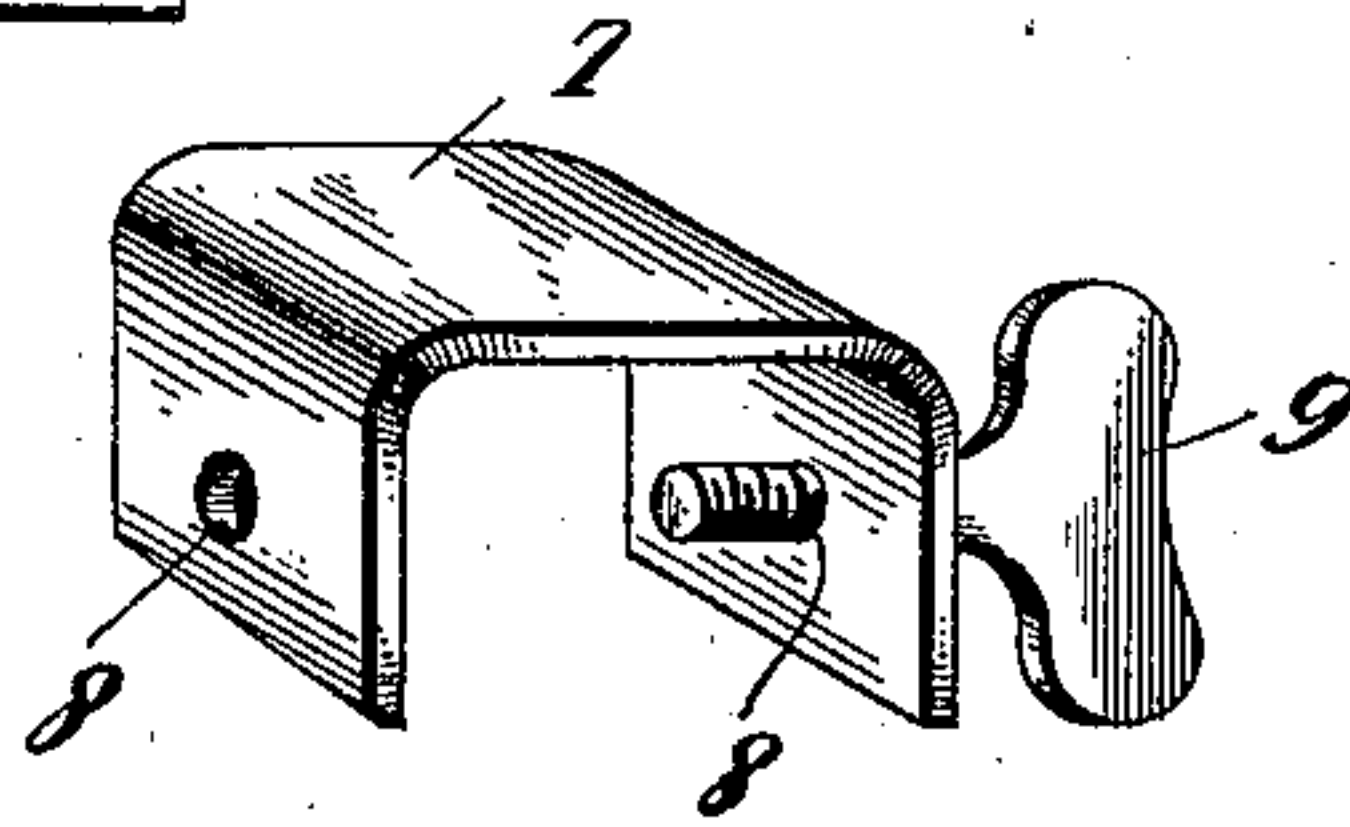


FIG. 3.



Witnesses

John F. Seufferlein.
Edwin Cruise.

By *his* Attorneys,

Inventor

John R. Weaver.

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

JOHN ROBERT WEAVER, OF COMMERCE, TEXAS, ASSIGNOR OF ONE-HALF
TO MIKE ST. CLAIR, OF SAME PLACE.

SEWING-MACHINE BRAKE.

SPECIFICATION forming part of Letters Patent No. 601,692, dated April 5, 1898.

Application filed October 4, 1897. Serial No. 653,961. (No model.)

To all whom it may concern:

Be it known that I, JOHN ROBERT WEAVER, a citizen of the United States, residing at Commerce, in the county of Hunt and State of Texas, have invented a new and useful Sewing-Machine Brake, of which the following is a specification.

This invention relates to brakes for sewing-machines designed to prevent retrograde rotary movement of the shaft; and the object of the invention is to provide a simple and efficient brake mechanism which may be easily and quickly attached to any ordinary sewing-machine to permit free rotary movement of the shaft in the proper direction and quickly stop a reverse movement.

With this object in view the invention consists of the several details of construction, combination, and arrangement of parts, as will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings, Figure 1 is a perspective view of a portion of a sewing-machine, showing my invention in position thereon. Fig. 2 is a perspective view of the gravity-dog and its supporting-standard detached. Fig. 3 is a perspective view of one of the clamps detached.

Similar reference-numerals indicate similar parts in the several figures.

1 indicates the table of a sewing-machine, and 2 the hand-wheel, which is mounted on the shaft 3 in the usual manner.

4 indicates a flat metal ring of substantially the same diameter as that of the hand-wheel, and this ring is provided with a series of pins 6, which project outwardly from one of its faces.

7 indicates U-shaped clips adapted to embrace the peripheries of the wheel 2 and ring 4, and each arm of these clips is provided with a perforation 8, that in one arm being for the passage of one of the pins 6 and the other being preferably threaded to receive a set-screw 9, adapted to engage the inner face of the hand-wheel 2 in order to clamp the ring and the hand-wheel together. These U-shaped clips form a ready and convenient means for securing the ring 4 to the hand-wheel; but it is obvious that other means

might be employed to accomplish this purpose.

10 indicates a standard consisting of a bar of metal having one end bent at a right angle to form a foot 11, which latter is perforated for the passage of a screw 12 or other fastening device, by means of which the standard may be secured to the machine-table. The upper end of the standard is slotted and bent to form spaced ears 13 to serve as bearings for a pin 14, which is firmly secured to the gravity-dog intermediate its ends. That portion of the dog below the pivot-pin 14 is much heavier than the portion above it, and normally the dog will be in a vertical position with its lower portion engaging the standard 10. The parts will be so arranged that the upper end of the dog will be in the path of travel of the pins and be engaged thereby when the shaft is rotated. When moving in the proper direction, the pins will rock the dog on its pivot and cause its lower end to move away from the standard as its upper end is engaged by the pins successively, and the pins will therefore be enabled to slip over the upper end of the dog. Should, however, the shaft be reversed, one of the pins will engage the upper end of the dog and force the lower end of the dog against the standard and thereby at once stop the retrograde movement of the shaft.

The device is simple and inexpensive to manufacture and, as will be readily seen, can be quickly and easily attached to any ordinary sewing-machine at present in use. While I have described the ring 4 as being attached to the hand-wheel, it is obvious that the ring may be mounted directly on the shaft 3 and operate in the same manner. The lower end of the dog, which comes in contact with the standard, may be provided with a cushion of rubber or other suitable material to prevent unnecessary noise, and it is to be understood that changes in the form, proportion, and the minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having thus described the invention, what I claim is—

1. In a sewing-machine, the combination of a series of pins supported to move with the shaft and concentric therewith, a vertical standard secured to the table, and a gravity-dog pivoted intermediate its ends to the upper end of the standard, with its upper end lying in the path of travel of the pins and its lower end normally engaging the standard, substantially as described.
2. In a sewing-machine, the combination with the shaft and the hand-wheel mounted thereon, of a ring secured to the hand-wheel and concentric to the shaft, a series of pins projecting outwardly from said ring, a vertical standard secured to the table of the machine, and a gravity-dog pivoted intermediate its ends to the upper end of said standard, with its upper end lying in the path of travel of said pins and its lower end normally engaging the standard, substantially as described.
3. In a sewing-machine, the combination with the shaft and the hand-wheel mounted thereon, of a flat metal ring of substantially the same diameter as the hand-wheel, a series of pins projecting outwardly from said ring, U-shaped clips adapted to embrace the peripheries of the hand-wheel and the ring, said clips having perforations near each end one of said perforations fitting over one of the pins, and the other perforation serving as a seat for a set-screw to engage the inner face of the hand-wheel, a standard secured to the machine-table, and a gravity-dog pivoted to said standard with its upper end lying in the path of travel of said pins, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOHN ROBERT WEAVER.

Witnesses:

W. W. RUTLAND,

H. C. BARKER.