

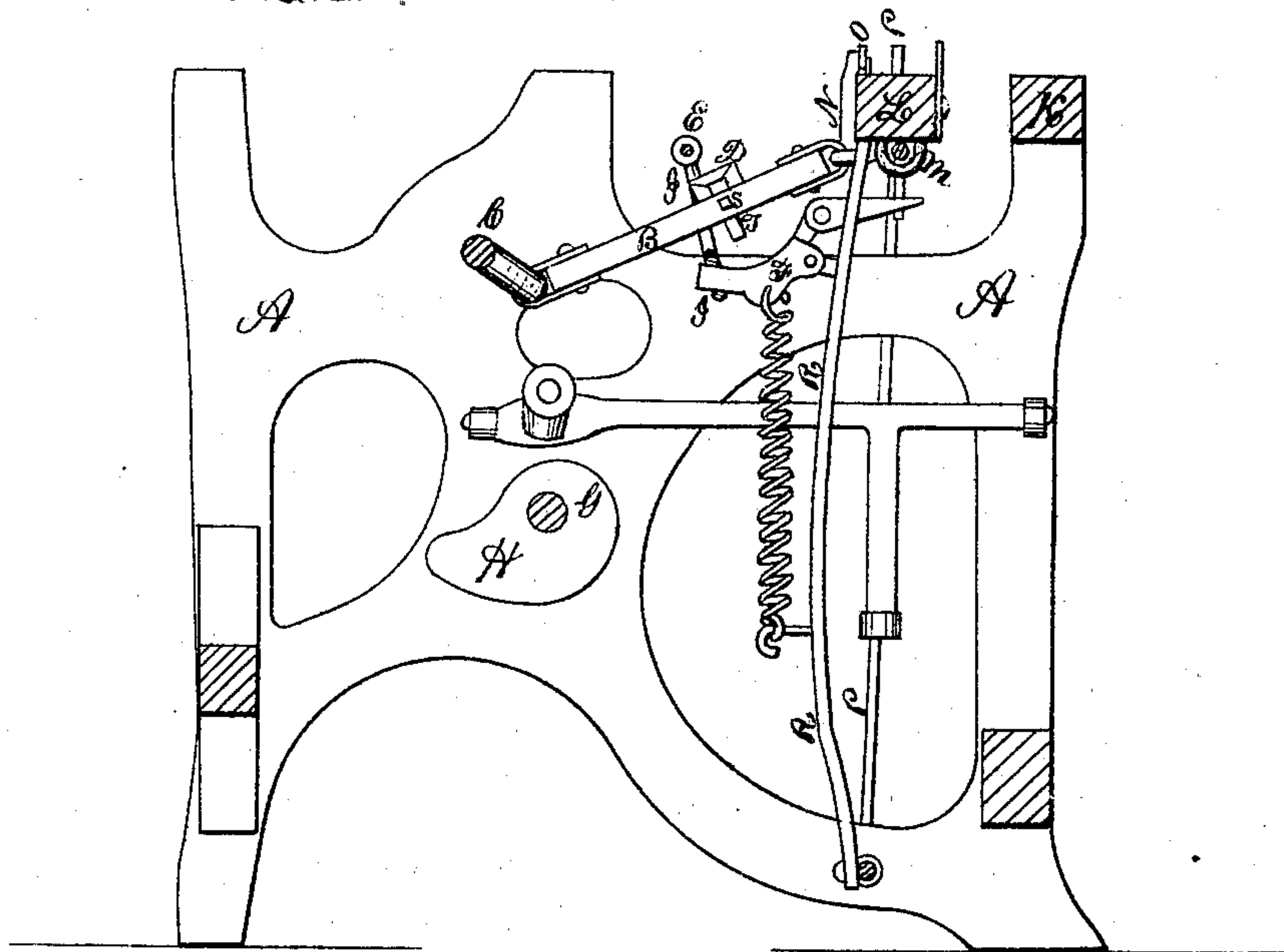
*J. Potter,*

*Loom Shuttle Check.*

*No. 99786.*

*Patented Feb. 15. 1870.*

FIG. 1.



WITNESSES.

*S. J. Holbrook*  
*A. Y. Park*

INVENTOR.

*Joseph Potter*

# United States Patent Office.

JOSEPH POTTER, OF DANIELSONVILLE, ASSIGNOR TO HIMSELF AND  
GEORGE L. LYON, OF BROOKLYN, CONNECTICUT.

*Letters Patent No. 99,786, dated February 15, 1870.*

## IMPROVEMENT IN MECHANISM FOR RELIEVING THE PRESSURE ON SHUTTLE-BOX SWELL.

The Schedule referred to in these Letters Patent and making part of the same.

*To all whom it may concern:*

I, JOSEPH POTTER, of Danielsonville, in the county of Windham, and State of Connecticut, have invented a new and useful Improvement in the Relief Motion for Looms, of which the following is a specification.

The nature of my invention consists in attaching to the lathe-arm of a loom, a dog, provided with a shank which passes through the arm, being adjustable to any position required, and held firmly by a set-screw.

To the ordinary bent lever which is pivoted to the sword-plate of the loom is secured a rod, which extends above the arm, and is provided at the upper end with a friction-roller, against which the connecting-arm between the lay and crank-shaft strikes when the arm is raised, thereby raising the bent lever pivoted to the sword-plate, which partially relieves the protecting-rod and the pressure of the fingers on the shuttle-binder, to facilitate the passage of the shuttle in the ordinary manner. This is known as the relief motion in looms.

The object of this my improvement is to make the action of the relief motion more nicely adjustable and more efficient, and to reduce the friction and strain of the parts, by which their durability is much increased.

Figure 1 is an elevation showing the right-hand end of a loom with my improvement.

A is the frame of the loom;

B is the arm;

C, the crank-shaft;

G, the cam-shaft;

H, the cam which operates the picker-staff P.

M is the protecting-rod, and

N, the finger pressing against the shuttle-binder O.

L is the lathe-beam, and

R, the sword-plate to which the lever F in the relief motion is attached.

My improvement consists of the rod I secured to the lower end of the lever F extending above the arm B, and provided with the horizontal friction-roller E, which, when the arm B is raised by the crank-shaft C, rolls upon the dog D which has its shank T inserted in the arm B, and which is adjusted by the set-screw S, thereby operating the other parts of the relief motion.

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

The combination with the pivoted lever F and protecting-rod, of the rod I, roller E, and the dog on the connecting-arm B, or of their equivalents, substantially as and for the purposes hereinbefore set forth.

JOSEPH POTTER.

Witnesses:

S. T. HOLBROOK,

A. F. PARK.