(No Model.)

O. A. SAWYER & C. S. FOSS.

PICKER STAFF CHECK FOR LOOMS.

No. 294,680. Patented Mar. 4, 1884.

Fig. 1

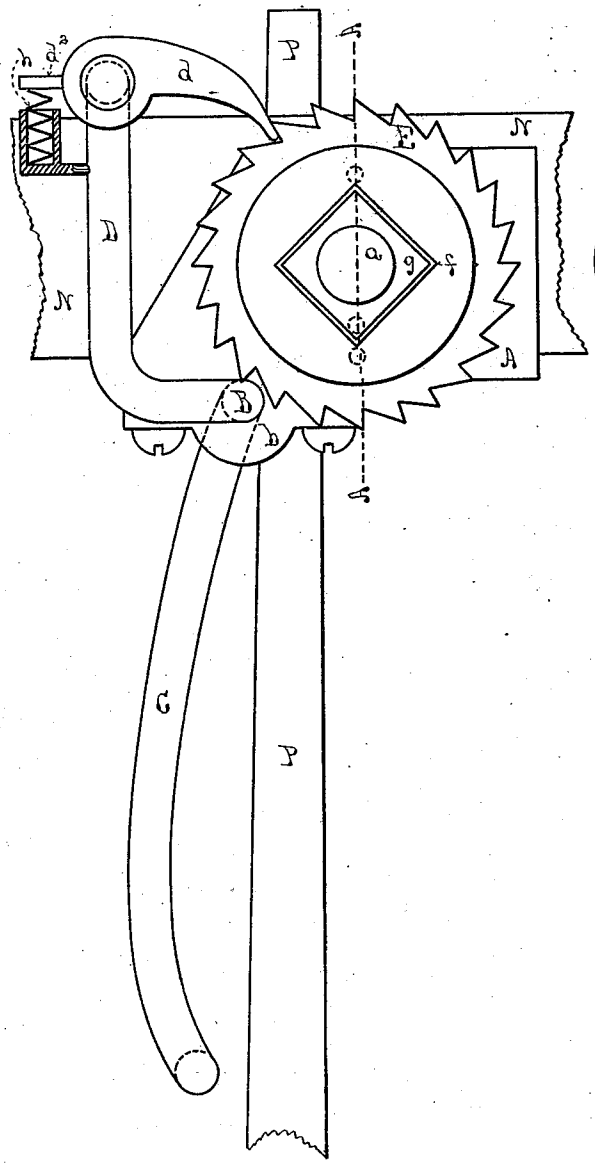
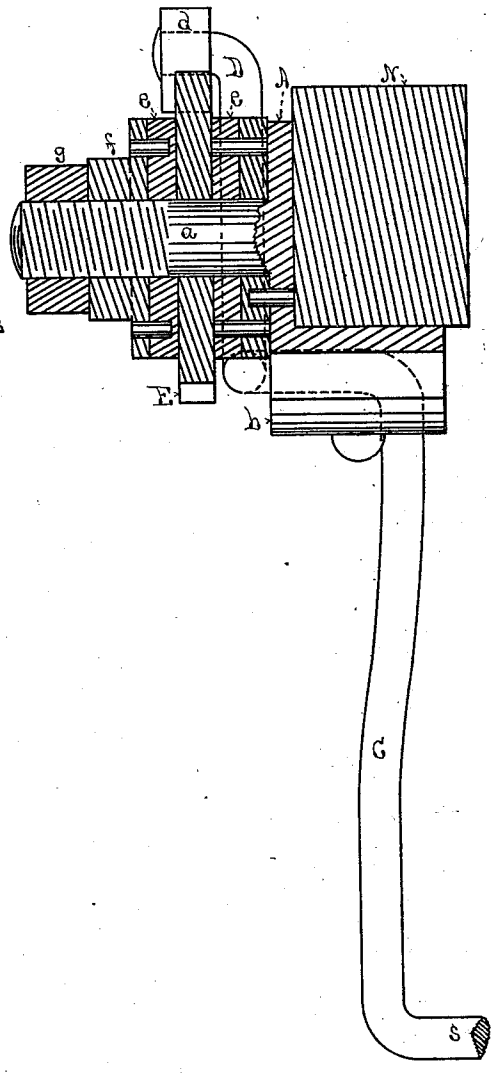


Fig. 2



Witnesses
Wm. S. Brown
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Inventor
O. A. Sawyer
C. S. Foss
by their Atty
Lothrop & Lee

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

ORREN A. SAWYER AND CHARLES S. FOSS, OF LOWELL, MASSACHUSETTS, ASSIGNORS OF THREE-FOURTHS TO MOSES M. LAHNE, OF SAME PLACE.

PICKER-STAFF CHECK FOR LOOMS.

SPECIFICATION forming part of Letters Patent No. 294,680, dated March 4, 1884.

Application filed March 30, 1882. (No model.)

To all whom it may concern:

Be it known that we, ORREN A. SAWYER and CHARLES S. FOSS, of Lowell, Middlesex county, Massachusetts, have invented a new and useful Improvement in Picker-Staff Checks for Looms, of which the following is a specification.

Our invention relates to devices for checking the movement of the picker-staff of a loom when it is struck by the shuttle at the completion of the flight of the latter; and its objects are to support the picker-staff after being struck by the shuttle, to prevent too free movement in a backward direction, and to provide a mechanism which, while so arresting the backward movement of the picker-staff and shuttle, will not bear upon the picker-staff with force to move it forward after arresting its backward movement. We accomplish these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a front elevation, partly in section, and Fig. 2 is a side view, also partly in section, of our invention.

A is the base-plate, provided with the stud *a*, and having the bearing *b*, which supports the rock-shaft B, the latter being provided with the arm C, against the crank part *s* of which the picker-staff comes in contact.

D is a curved arm connected to the rock-shaft, and provided with the pawl *d*.

E is a ratchet-wheel placed on the stud *a* between friction-washers *e e*, the wheel and washers being retained on the stud by the binding-nut *f*, which is provided with a thread, which engages with the threaded portion of the stud. The binding-nut is followed by a jam-nut, *g*, which, being turned down on the binding-nut, keeps it in whatever place desired. The pawl *d* is kept in engagement with the ratchet-wheel E by the spiral spring *h*, which is carried upon the arm D and acts against the lug d^2, attached to the pawl.

The crank part *s* of arm C is carried across the path of the picker-staff, so that the staff will come in contact with the crank-arm and operate the check mechanism.

The rock-shaft B is placed near to the stud *a*, so that the weight of the backwardly-curved attached arm D will bring back the pawl after each backward movement of the staff as soon as it is moved forward by the loom mechanism.

N is a portion of a loom-lay.

P is a portion of a picker-staff.

The operation of our device may be thus described: The base or bed plate being attached to the lay of the loom at a point which will cause the crank-arm *s* to come into contact with the picker-staff before the staff reaches the extreme end of its backward movement, the picker-staff will, when struck by the shuttle as it enters the shuttle-box, be forced back, and, coming into contact with the arm of the check, will be compelled to move the ratchet-wheel, because of the engagement of the pawl with said wheel. As the ratchet-wheel is pressed between the friction-washers with any desired pressure by means of the binding-nut, any requisite resistance can be obtained and applied to resist and check the backward movement of the picker-staff.

What we claim as new and of our invention is—

1. The combination of the loom-lay N and a ratchet-wheel, and friction-creating devices for retarding the rotation thereof, with a rock-shaft having an arm adapted for contact with the picker-staff, and an arm provided with a pawl which engages with the ratchet-wheel, substantially as described.

2. The combination of the loom-lay N and the ratchet-wheel E, frictional washers *e e*, and binding-nut *f* with the rock-shaft B, provided with the arms C and D, one of which is provided with a pawl engaging with the ratchet-wheel, and the other with an end portion adapted to extend across the path of the picker-staff, substantially as described.

ORREN A. SAWYER.
CHAS. S. FOSS.

Witnesses:
LEPINE C. RICE,
E. L. RICE.

Correction in Letters Patent No. 294,680.

It is hereby certified that in Letters Patent No. 294,680, granted March 4, 1884, upo the application of Orren A. Sawyer and Charles S. Foss, of Lowell, Massachusetts, fc an improvement in "Picker-Staff Checks for Looms," the name of the assignee (three-fourths interest therein was erroneously written and printed "Moses M. Lahne that said name should have been written and printed *Moses M. Lahue;* and that tl proper correction has been made in the files and records pertaining to the case in tl Patent Office, and should be read in the patent to make it conform thereto.

Signed, countersigned, and sealed this 25th day of March, A. D. 1884.

[SEAL.]

M. L. JOSLYN,
Acting Secretary of the Interi

Countersigned:

BENJ. BUTTERWORTH,
Commissioner of Patents.