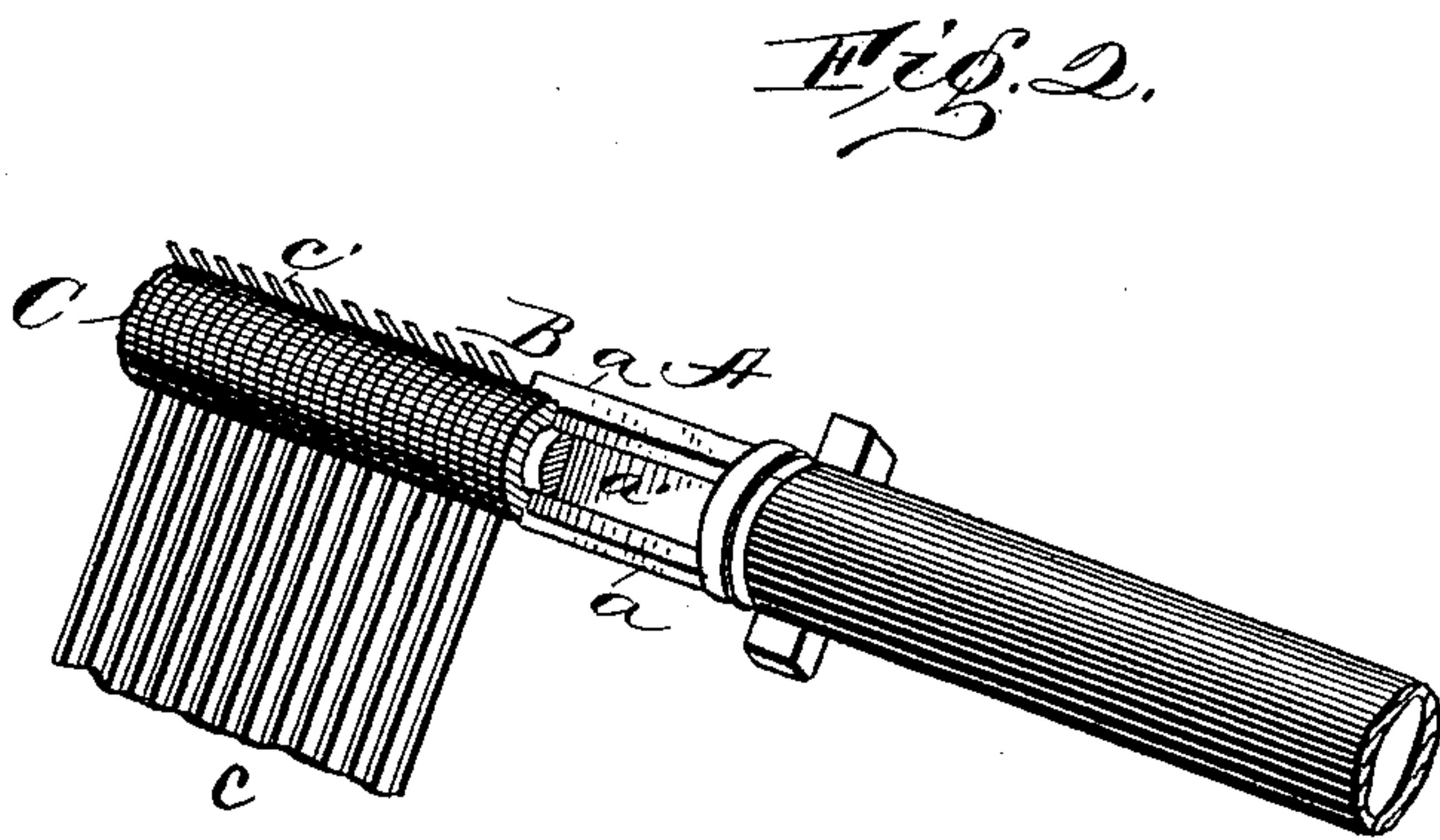
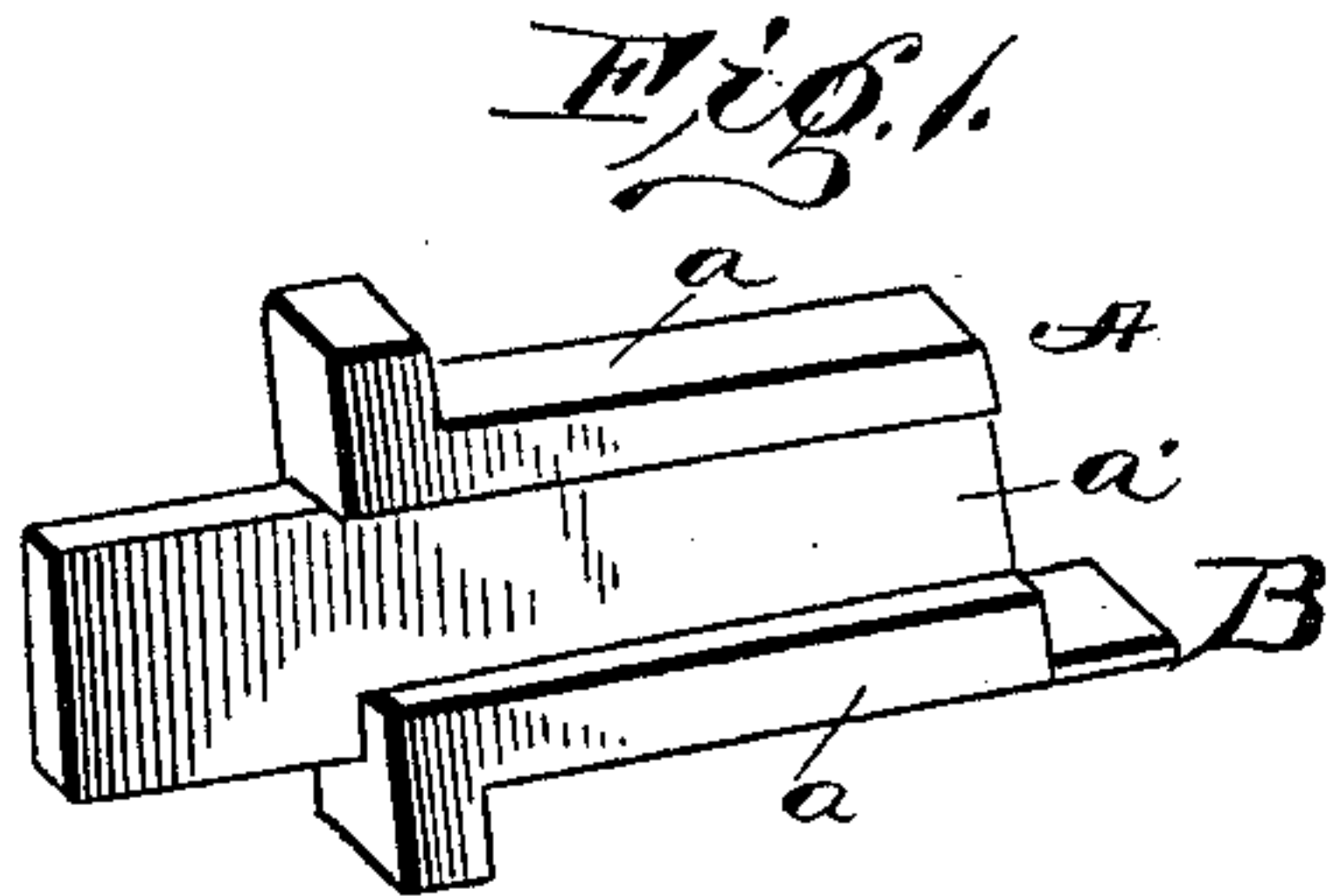


(No Model.)

E. ADAMSON.
PLUNGER FOR REED SETTING MACHINES.

No. 583,297.

Patented May 25, 1897.



witnesses
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UNITED STATES PATENT OFFICE.

EDWARD ADAMSON, OF PAWTUCKET, RHODE ISLAND.

PLUNGER FOR REED-SETTING MACHINES.

SPECIFICATION forming part of Letters Patent No. 583,297, dated May 25, 1897.

Application filed February 25, 1897. Serial No. 624,978. (No model.)

To all whom it may concern:

Be it known that I, EDWARD ADAMSON, a citizen of the United States, and a resident of Pawtucket, in the county of Providence and State of Rhode Island, have invented new and useful Improvements in Plungers for Reed-Setting Machines; and I do hereby declare the following to be a full, clear, and exact description of said invention, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to reed-setting machines; and the novelty consists in the construction, arrangement, and adaptation of the plunger used in such machines, as will be more fully hereinafter set forth, and specifically pointed out in the claims.

The invention appertains to that class of machines on which Letters Patent No. 107,865, of 1870, were granted and in which the semi-circular strips which form the ribs of the reed are held in pairs and work loosely through the hollow tubular drivers or sleeves common to such machines. The wires which form the dents are fed across the machine and between the rib-strips. A reciprocating frame carries the hollow tubular sleeves or plungers, which pass between the rib-strips to force each dent snugly against the binding-cord, this cord being understood to be passed once around each rib after the insertion of each dent.

With this general description of the class of machines to which my invention is adapted it is only necessary to say that the novelty resides in the construction of the plunger alone and that illustration or further description of such other parts is not called for, they forming no part of the device in question.

To prevent the ribs from spreading or the dents from becoming disengaged or displaced in the finished reed, it is necessary to clench the ends of the dents—that is to say, bend them at an angle close to the outer side of the rib.

The object of my invention is to thus clench the dents as they are set into the reed. To this end I form upon the plunger-head a projection which in the act of setting the dent contacts with the end of each dent outside the rib and clenches it firmly in its position.

The invention is fully illustrated in the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of my improved plunger. Fig. 2 is a detail view of a portion of a reed, showing the manner in which said plunger clenches the dents.

Referring to the drawings, A designates the plunger, having guides *a*, which pass along the sides of the rib, and central flat portion *a'*, which passes between the rib-strips to force the several dents snugly against the binder. Upon one side of the plunger (that side which passes on the outer side of the rib) I form a projection B, which extends forward beyond the transverse plane of the abutting head of the plunger. The longitudinal plane of this projection B is slightly outside the longitudinal plane of the inner edge of the outer guide *a*, and the forward end strikes each dent and forces it over into the angle shown in Fig. 2, in which C designates the rib, *c* the dents, and *c'* the clenched portion.

By my invention each reed, when completed by the setting-machine, has each dent clenched securely, and time, labor, and expense are thus saved. It is inexpensive, and in no sense modifies the action of the setting-machine. It only improves the result at a less expense than where the clenching is done after the reed is formed.

Having thus described the essential feature of the invention, what I claim, and desire to secure by Letters Patent, is—

1. A plunger for reed-setting machines, provided with a projection, B, extending beyond the end of the plunger, adapted to clench the dents upon the outer side of the ribs, substantially as and for the purposes set forth.

2. The plunger, A, having guides, *a*, flat central portion, *a'*, and the projection, B, the whole being adapted for operation, substantially as and for the purposes specified.

In testimony whereof I affix my signature in presence of two subscribing witnesses.

EDWARD ADAMSON.

Witnesses:

EDMUND P. SULLIVAN,
FREDERICK A. JILLSON.