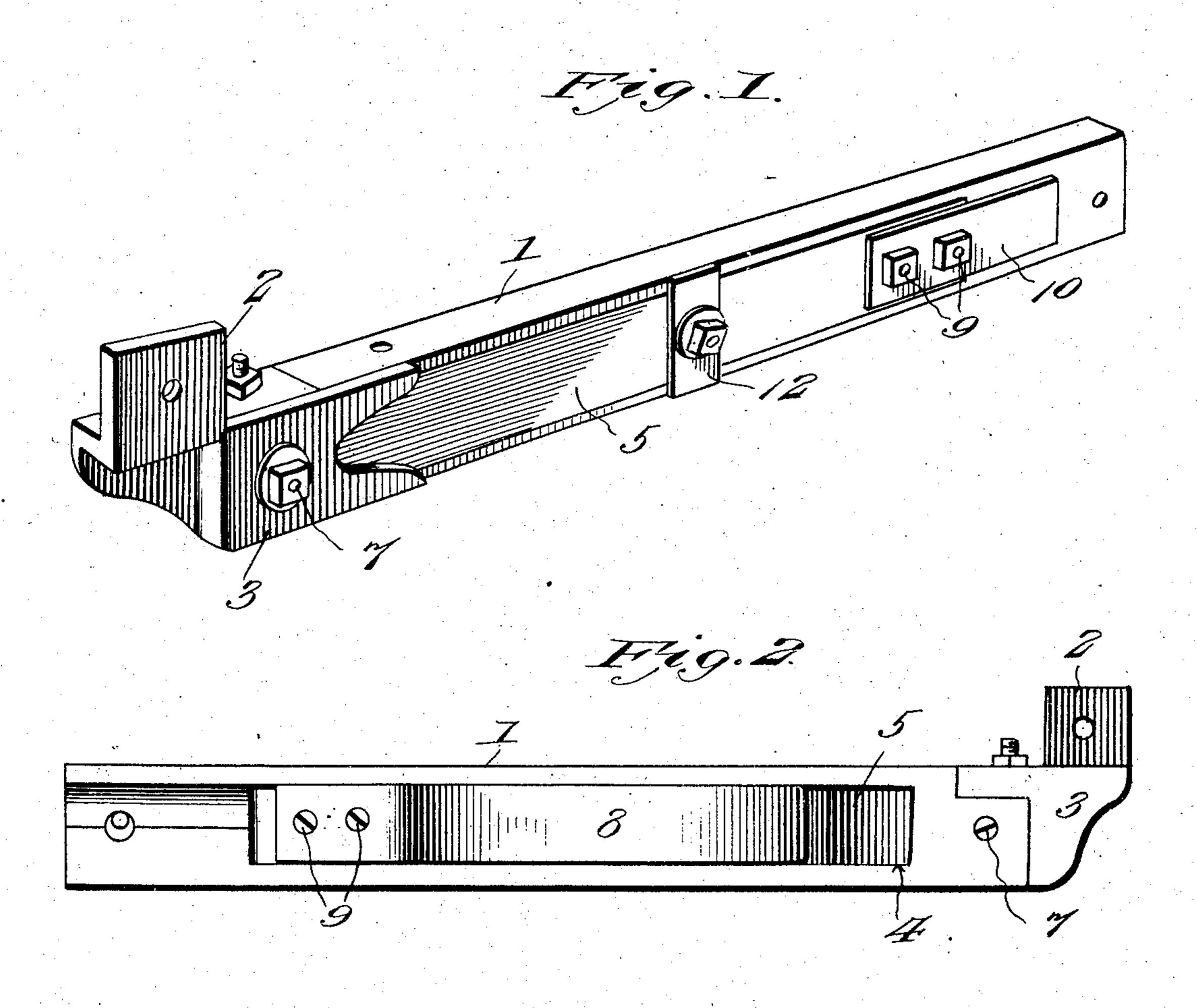
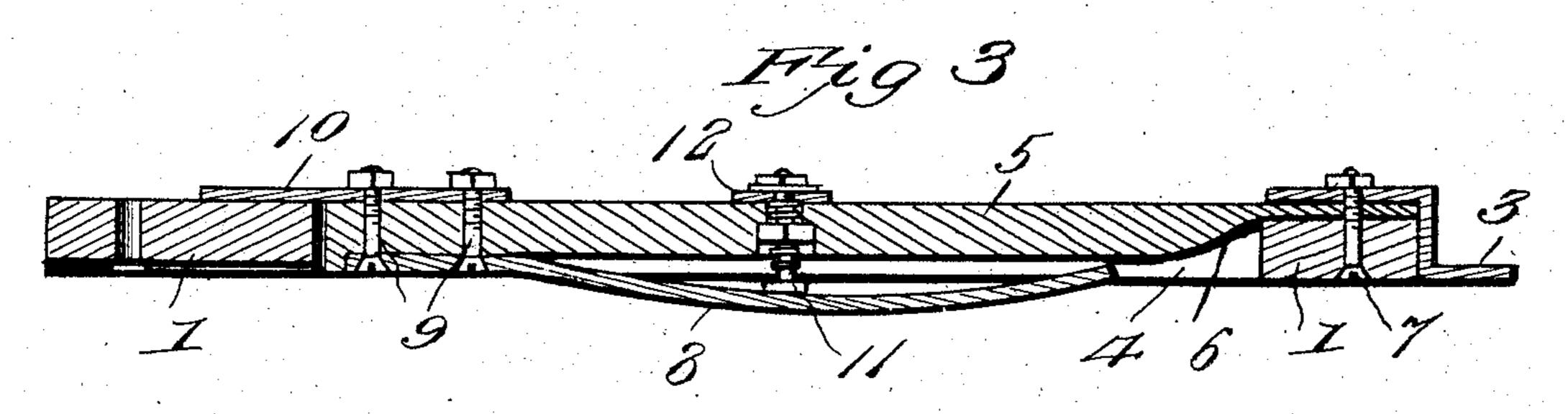
S. TAYLOR & G. D. WOOLLEY. SHUTTLE BINDER. APPLICATION FILED MAY 13, 1903.





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SAMUEL TAYLOR AND GEORGE D. WOOLLEY, OF NEW BEDFORD, MASSACHUSETTS.

SHUTTLE-BINDER.

SPECIFICATION forming part of Letters Patent No. 780,920, dated January 24, 1905.

Application filed May 13, 1903. Serial No. 156,971.

To all whom it may concern:

Be it known that we, Samuel Taylor and George D. Woolley, citizens of the United States, residing at New Bedford, in the county of Bristol and State of Massachusetts, have invented new and useful Improvements in Shuttle-Binders, of which the following is a specification.

Our invention relates to new and useful improvements in swells or binders for shuttle-boxes of looms; and its object is to provide a device of this character which does not employ hinges, pins, or other similar securing devices and which will not when broken swing inwardly and break the shuttle-box, swell-plates, shuttles, &c., as is often the case where binders of the ordinary form are used.

Another object of the invention is to secure the swell to the outer end of the shuttle-box and so arrange the same that it will always be kept normally in one position, thereby preventing shuttle-marks, cutting of filling, and wear upon the shuttles.

With the above and other objects in view 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 our invention, and in which—

Figure 1 is a perspective view of our improved swell-binder. Fig. 2 is an inner elevation thereof, and Fig. 3 is a longitudinal section.

Referring to the figures by numerals of reference, 1 is a strip adapted to be secured to the front of a shuttle-box by means of a bolt, (not shown,) which may be inserted through a bracket 2, formed at one side of a casting 3, which is secured to an end of the strip 1. This strip has a longitudinally-extending slot 4 thereon, within which is arranged a laterally-movable strip 5, one end 6 of which is reduced in thickness and clamped upon one end of the strip 1 by means of a bolt 7 or other suitable device. The reduced end of the strip 5 is arranged between strip 1 and the casting 3. A spring-strip 8 is fastened to the free end of strip 5 and is bow-shaped, so as to

extend beyond the inner face of the strip 1. 50 The bolts 9 employed for securing this strip in position are also preferably used for fastening a stop-plate 10 to the free end of strip 5. This plate is adapted to limit the inward movement of the strip 5. A screw 11 is mount- 55 ed within strip 5 at a point under the central portion of the bow-spring 8, and by means of this screw the said spring will be adjusted from or toward the face of the strip 1 a desired distance. Bolt 11 also serves to secure a 60 cross-plate 12 in position upon strip 5. This plate extends over the edges of the slot 4 and is employed for the purpose of preventing strip 5 from swinging inward in the event of the stop-plate 10 breaking. By reducing the 65 thickness of the strip 5 at one end and clamping said end to the outer face of strip 1 it will be seen that it is unnecessary to provide a hinge-pin for the strip 5. Where hingepins have been employed heretofore it has 70 been found that they soon work loose within the strips 1 and 5 and fall from their proper positions, thereby releasing the strip 5, which is usually thrown into the shuttle-box and causes considerable damage to the adjacent 75 parts of the loom and the material being woven thereby.

In the foregoing description we have shown the preferred form of our invention; but we do not limit ourselves thereto, as we are aware 80 that modifications may be made therein without departing from the spirit or sacrificing any of the advantages thereof, and we therefore reserve the right to make such changes as fairly fail within the scope of our invention.

Having thus described the invention, what is claimed as new is—

1. A swell for looms, comprising a strip having a longitudinal slot therein, a bracket-cast-90 ing secured to one end of the said strip, and a laterally-movable buffer-strip working in the said slot and having one end reduced and secured to the first-named strip to provide a yielding connection, the buffer-strip having a 95 bow-spring secured at one end to the inner side thereof and simultaneously movable with said buffer-strip.

2. A swell for looms, comprising a strip having a longitudinal slot therein, a laterally-movable buffer-strip working in the slot and provided with an inner bow-spring secured thereto at one end, a stop attached to the outer portion of one end of the buffer-strip and projecting from the latter, an intermediate auxiliary stop extending across the outer portion of the strip, and an adjusting device carried by the buffer-strip and engaging the bow-spring, the

said adjusting device also serving to secure the auxiliary stop to the buffer-strip.

In testimony whereof we affix our signatures in presence of two witnesses.

SAMUEL TAYLOR. GEORGE D. WOOLLEY.

Witnesses:

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