No. 692,087. Patented Jan. 28, 1902.

E. S. STIMPSON.

LOOM TEMPLE.

(Application filed Oct. 7, 1901.)

(No Model.)

Fig: 1.

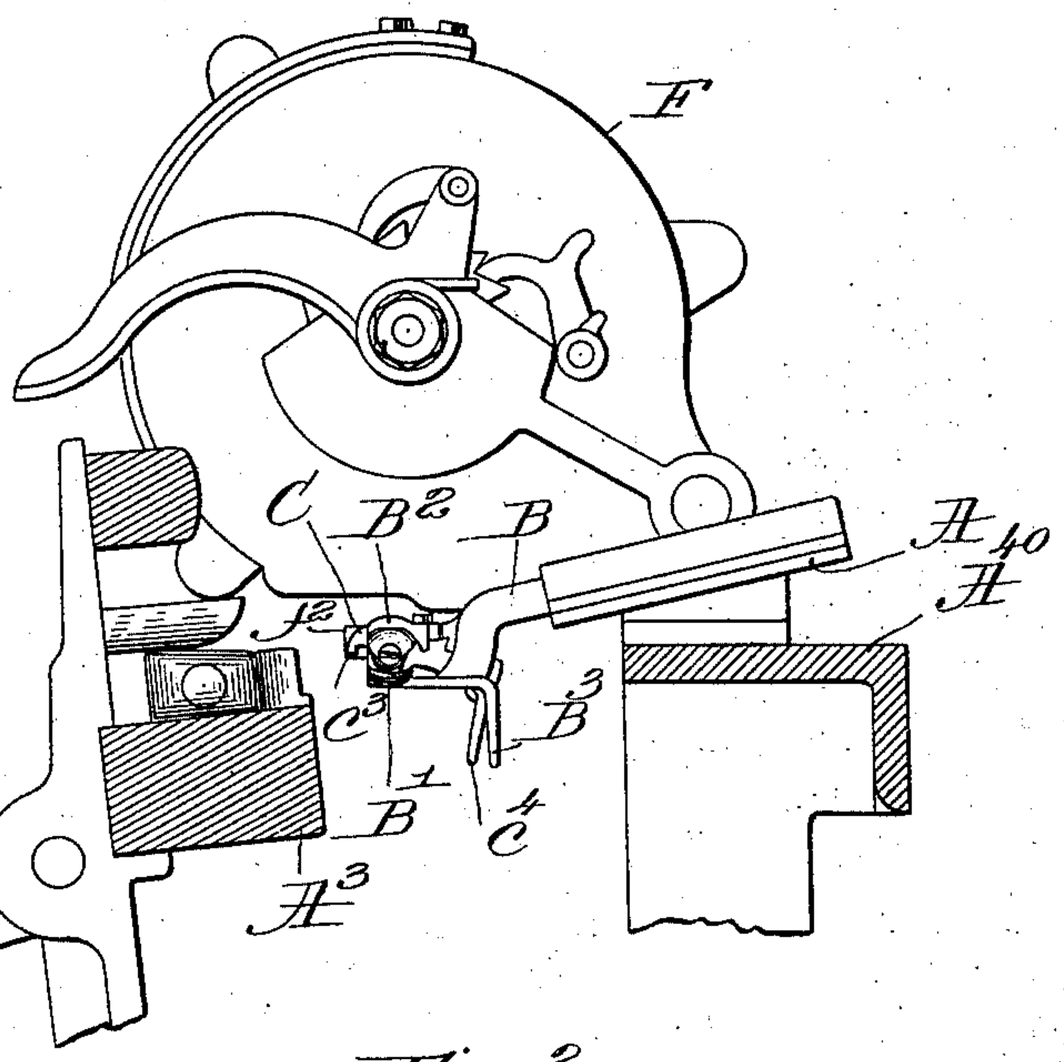


Fig: 2.

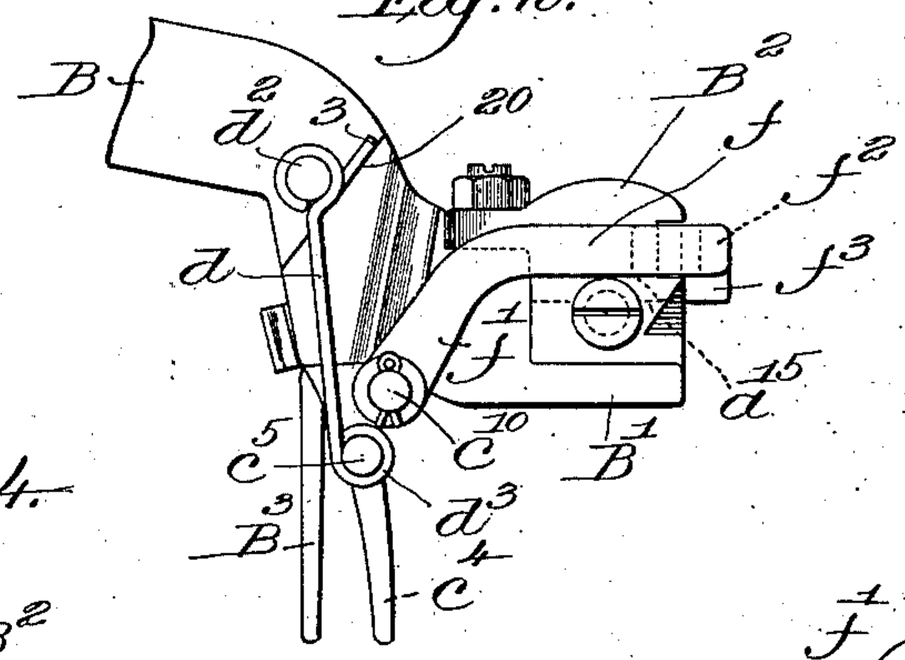


Fig: 4.

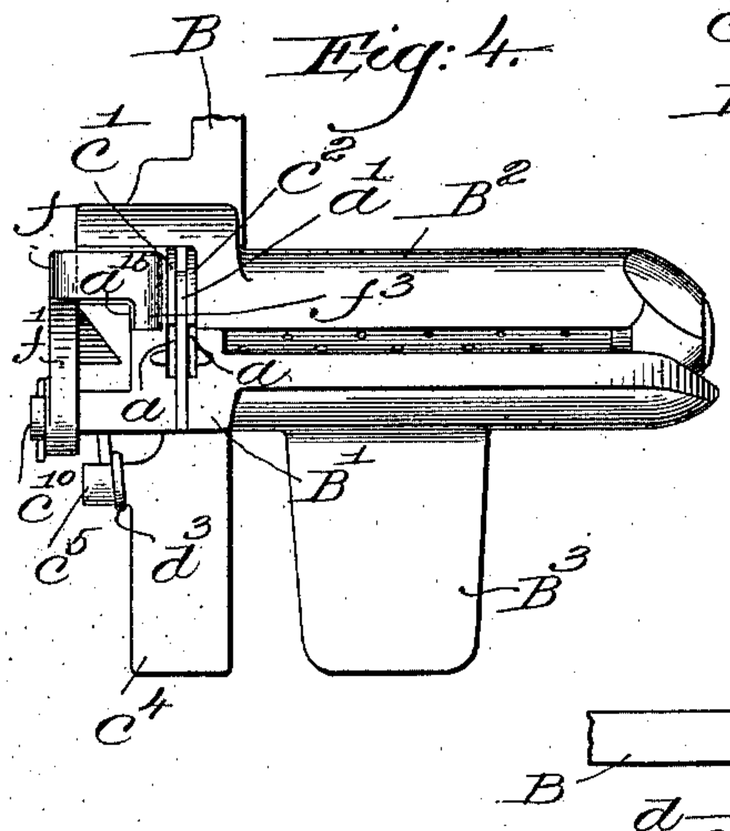


Fig: 3.

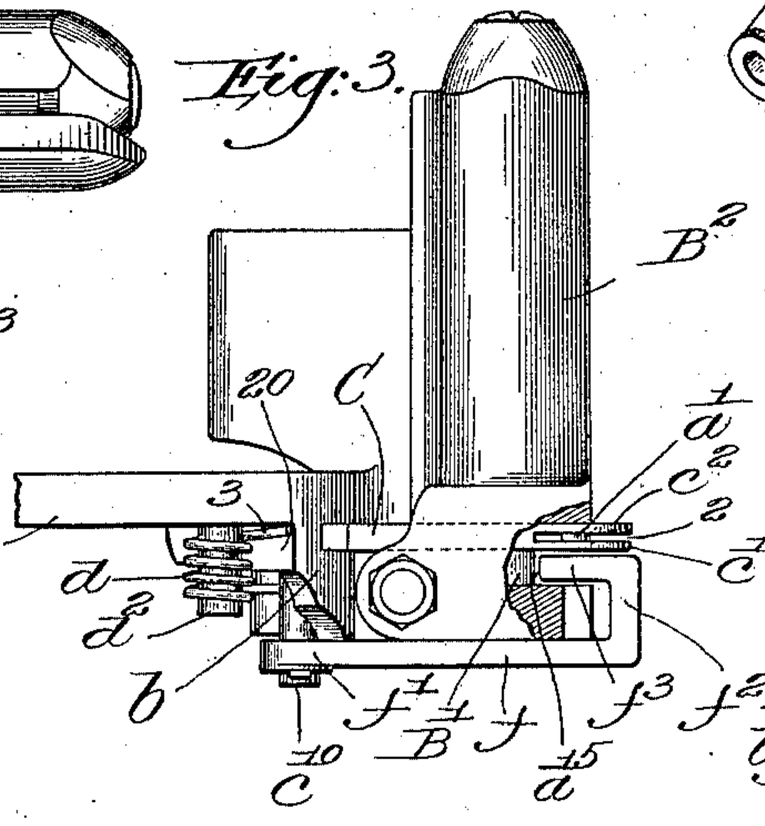
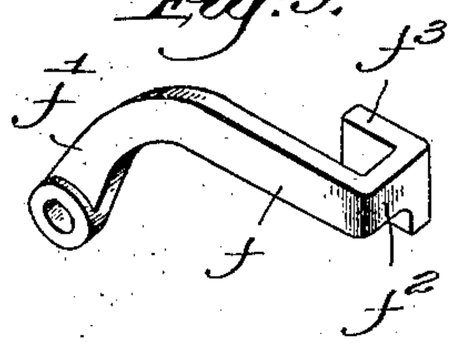


Fig: 5.



Witnesses,
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UNITED STATES PATENT OFFICE.

EDWARD S. STIMPSON, OF HOPEDALE, MASSACHUSETTS, ASSIGNOR TO DRAPER COMPANY, OF HOPEDALE, MASSACHUSETTS, A CORPORATION OF MAINE.

LOOM-TEMPLE.

SPECIFICATION forming part of Letters Patent No. 692,087, dated January 28, 1902.

Application filed October 7, 1901. Serial No. 77,853. (No model.)

To all whom it may concern:

Be it known that I, EDWARD S. STIMPSON, a citizen of the United States, residing at Hopedale, in the county of Worcester and State of Massachusetts, have invented an Improvement in Loom-Temples, of which the following description, in connection with the accompanying drawings, is a specification, like characters on the drawings representing like parts.

This invention relates to loom-temples particularly adapted for use in automatic looms, the temple being provided with a parting device to part the filling-thread outside of the selvage of the cloth, such a temple being shown in United States Patent No. 585,465, dated June 29, 1897. Sometimes the shuttle will be stopped in its flight in such position that as the lay beats up the parting device will strike the shuttle and either or both are apt to be damaged.

The present invention has for its object the production of means for protecting the shuttle when improperly positioned from injury by the thread-parting device of a loom-temple of the general type referred to and to protect the thread-parter itself from being injured by engagement with the shuttle.

The novel features of the invention will be hereinafter described, and particularly pointed out in the following claims.

Figure 1 is a sectional view of a sufficient portion of a loom to be understood with one embodiment of the invention applied thereto. Fig. 2 is an enlarged outer side elevation of the temple shown in Fig. 1 in normal position. Fig. 3 is a top or plan view, partly broken out, of the loom-temple and protective means for the thread-parting device. Fig. 4 is a front elevation of the temple; and Fig. 5 is a perspective view, detached, of the protector.

The lay A^3, breast-beam A^{40}, filling-feeder F, Fig. 1, are substantially as in United States Patent No. 529,940, and the temple-stand A, slide-bar B, having the pod B′, slotted at a to receive a steel blade a', the cap B^2, heel B^3, attached to the pod, the slotted ear b on the shank B, and the thread parter or cutter C inserted in the slotted portion of the pod and ear are and may be all as in Patent No. 585,465, referred to, the front end of the parter being slotted at 2 to straddle the blade and present two arms c' c^2, Fig. 3, each having a downturned hook c^3, Fig. 1, to engage the filling-thread. A spring d normally projects the hooked end through the slot a and elevates it, as in Figs. 1 and 4, the coil of the spring being mounted on a lateral stud d^2 on the bar B, the free end d^3 of the spring engaging a lug c^5 on the depending heel c^4 of the cutter or parter C, the other end 3 of the spring bearing against a shoulder 20 on the bar. As the lay beats up it engages the heel c^4 and moves the parter C toward the front of the loom, at the same time depressing its hooked end c^3, so that a filling end will be caught and drawn across the blade a', severing the thread, as in Patent No. 585,465, before the heel B^3 is engaged by the lay, the spring d returning the parter to normal position as the lay moves back. It sometimes happens that the shuttle is stopped in its flight opposite the temple, so that on the beat-up of the lay the projecting end of the parter, of small cross-section, will engage and stab or break the shuttle, the impact frequently acting to bend or otherwise injure the parter. To obviate this, I have devised a protector, one form of which is shown separately in Fig. 5, said protector consisting of an arm f, having one end f' downturned and fulcrumed on a stud c^{10}, extended laterally from the cutter C near the upper end of the heel, so that the arm is adjacent the outer end of the pod and cap of the temple. The free upper end of the arm f is bent laterally, as at f^2, and provided with an enlarged head f^3, shown as parallel to the arm f and extended backward and entering a recess a^{15} in the pod, the bottom of the recess supporting the head and maintaining it and the offset f^2 in the position shown in the drawings, the upright face of the offset projecting toward the lay a slight distance beyond the slotted end of the cutter C. Under normal conditions the protector does not interfere with the operation of the thread-parter, the retractive movement of the cutter acting also to move the protector in unison; but if the shuttle is stopped opposite the temple it engages the broad face of the offset f^2 of the protector as the lay beats up and pushes the arm $f f'$ to the left, viewing Fig. 2, and as said arm is connected with the cutter C the latter is moved in the same direction as the

lay completes its forward movement, such movement of the cutter keeping its hooked end out of contact with the shuttle. The protector thus acts as a safety-guard or fender for the shuttle and also for the parting device, preventing engagement of the latter with and consequent injury to the improperly-positioned shuttle.

The precise construction and arrangement herein shown may be modified or changed in various particulars without departing from the spirit and scope of my invention.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A loom-temple having a blade and provided with a coöperating sliding thread-cutter, actuated by a moving part of the loom, and a protector operatively connected with and to retract the sliding cutter under abnormal conditions.

2. In a loom, a temple provided with a thread-parter, actuating means therefor operated by a moving part of the loom, and means operated by the shuttle when improperly positioned, to effect movement of and thereby prevent the thread-parter from accidentally engaging the shuttle.

3. A loom-temple provided with a relatively movable thread-parter having a heel and a normally exposed blade, means to engage the heel and actuate the parter, and a protector carried by the temple and adjacent the exposed portion of the thread-parter, and operatively connected with the heel, to move the latter and retract the blade when said protector is engaged by an improperly-positioned shuttle.

4. In a loom, a temple provided with a thread-parter including a spring-controlled sliding member having a hooked end to engage the thread, means to actuate the parter in opposition to its spring, and a protector operatively connected with the said sliding member and having its free end adjacent the hooked end thereof, impact of the protector with an improperly-positioned shuttle operating to retract the said hooked member and prevent injury to the shuttle or said member.

5. A loom-temple provided with a blade and a coöperating, spring-controlled sliding cutter having a hooked end to engage the thread, means to effect coöperation of the blade and cutter by retraction of the latter, to part the thread, and a protector pivotally connected with the cutter and having its free end adjacent the hooked end thereof, to retract the cutter by or through engagement of the protector with an improperly-positioned shuttle.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EDWARD S. STIMPSON.

Witnesses:
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