(No Model.)

H. UPTON & W. KENNARD.

CLOTHES TONGS.

No. 478,382. Patented July 5, 1892.

Fig. 1.

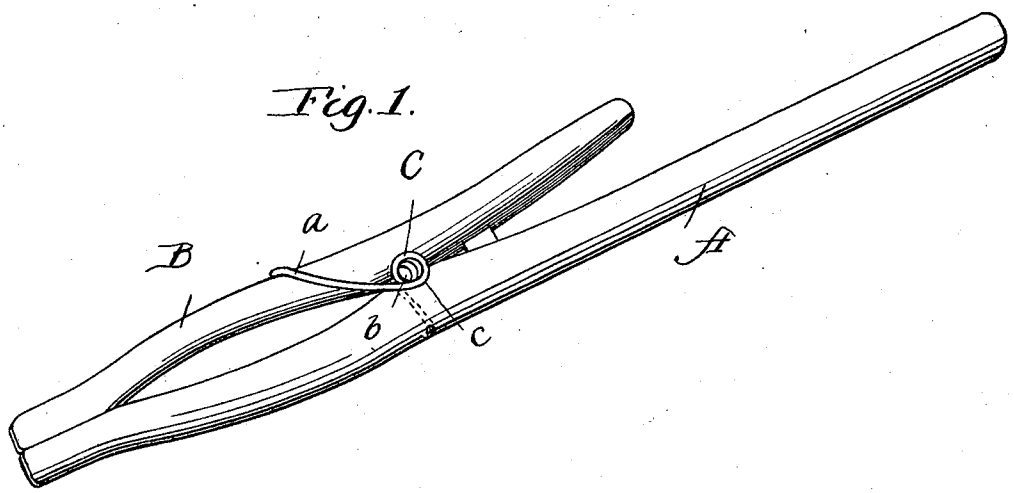


Fig. 2.

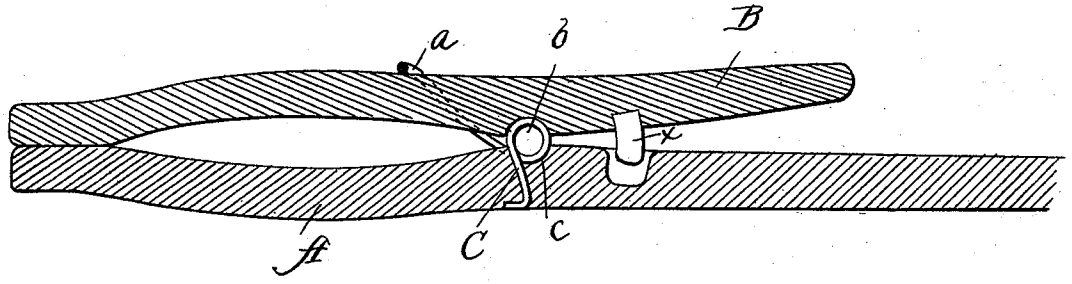
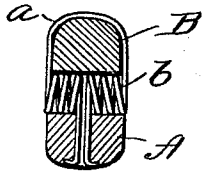


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

HORACE UPTON AND WILLIAM KENNARD, OF BAR HARBOR, MAINE.

CLOTHES-TONGS.

SPECIFICATION forming part of Letters Patent No. 478,382, dated July 5, 1892.

Application filed January 29, 1891. Serial No. 379,495. (No model.)

To all whom it may concern:

Be it known that we, HORACE UPTON and WILLIAM KENNARD, citizens of the United States of America, residing at Bar Harbor, in the county of Hancock and State of Maine, have invented certain new and useful Improvements in Clothes-Tongs, of which the following is a specification.

Our invention relates to clothes-tongs in which the two members are under tension of a spring.

It is the object of our invention to provide a looped coiled spring which shall answer as the pivot between the members and also serve as a sole means for holding them together; second, to provide such a form of looped coiled spring, as will enable both members of the tongs to be held or engaged by two strands of the wire; third, to arrange the coil so that a spring of considerable force will be provided, and especially to avoid projecting points, staples, or other holding devices which in the use of the device will be liable to catch upon the edge of the boiler and injure the joint or spring connection of the tongs.

It is also our purpose to leave as little as possible of the wire of the spring connection exposed, while we have each member held firmly by two strands thereof.

It is further our object to provide for the ready removal of one member of the tongs from the other in case it is desired to replace either when broken or damaged.

In addition to these objects we aim to provide means in addition to the spring-joint to aid in receiving lateral strain.

In the accompanying drawings, Figure 1 is a perspective view of the tongs. Fig. 2 is a longitudinal section; Fig. 3, a transverse section at the spring-joint.

The tongs are made up of two members A B, the former being long and adapted to be held in the hand, while the latter is somewhat shorter and is intended to be pressed upon by the thumb to open the front end when clasping the clothes between the forward ends of the members. The pivot-joint between the two members consists, solely, of a spring C of special form, the coil of which fits between the two members in semicircular sockets *c*, formed in each. The short member is held removably to the longer member by a loop, as shown at *a*. This loop completely embraces the short member, the two strands of the wire extending down alongside the said short member, and at the ends of these strands the wire is continued in a coil *b* inwardly between the two members until they meet, and then the free ends or strands which are adjacent to each other are carried through the longer member from its inner to its outer side and are completely embedded in said member, the ends being turned aside and clinched to present a perfectly smooth surface on the lower side of the longer member. From this it will be clearly seen that both members are held by two strands of the wire and a minimum portion of the wire is exposed, the greater part being located between the members and embedded in the longer one. The surfaces of the members are left free from projecting fastening devices for the spring, and the wire of the spring is protected to the fullest extent. This is a material feature in devices of this character which are used to withdraw clothes from boilers and which in such use are fulcrumed upon the edge of the boiler and are turned thereon to wrap the clothes about the clamping ends and to act as levers in lifting the clothes or properly adjust them within the boiler. In this use the joint becomes the bearing-point, and unless said joint is strong and the spring connection well protected there is great liability of damaging the same and destroying the usefulness of the implement. The pressure of the spring is exerted evenly on both members, and they ordinarily would be held against lateral displacement by the spring connection alone; but in order to provide additional means for this purpose we employ a curved tongue consisting of a small piece of metal embedded in the member B and entering a slit or recess in the other member, the fit being accurate enough to prevent lateral play. The members, as before stated, will pivot upon the coil of the spring, and in said movement the projection will move in the recess and aid in maintaining the parts in their proper relation to each other. It will be observed from this construction of running the two sections of the coil inwardly toward each other that a coil of con-

siderable strength is provided. It is protected, and the fastening-strands can be completely embedded and protected.

We claim as our invention—

1. In combination, the two members A B, means for holding them together pivotally, consisting of a loop the two strands of which extend down the sides of the member B and are continued inwardly toward each other and transversely between the two members, forming two sections of a coil, the said sections being held in place by a fastening embedded and protected in the body of the long member, said fastening consisting of the two strands of the wire at the inner ends of the sections, which are continued from the inner to the outer side and clinched to make a flush surface.

2. In combination, the two members A B, the loop-spring connection between them, said spring forming the pivot of the members, and means for preventing lateral displacement, consisting of a tongue on one member entering a slit in the other member, substantially as described.

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

HORACE UPTON.
WILLIAM KENNARD.

Witnesses:
EDGAR F. BREWER,
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