(No Model.)

H. UNDERWOOD & S. SCHWEIZER.

CLOTH BEAM FOR LOOMS.

No. 342,148. Patented May 18, 1886.

Fig. 1.

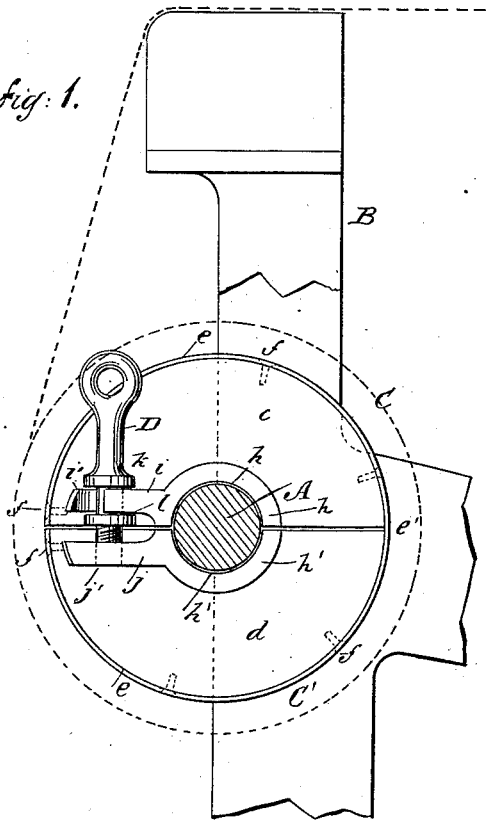


Fig. 3.

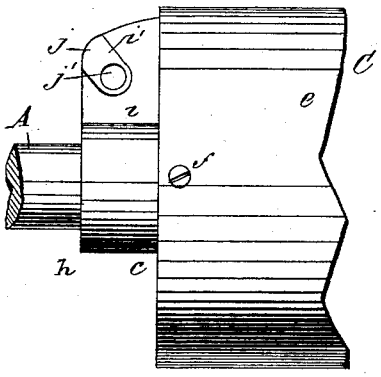


Fig. 2.

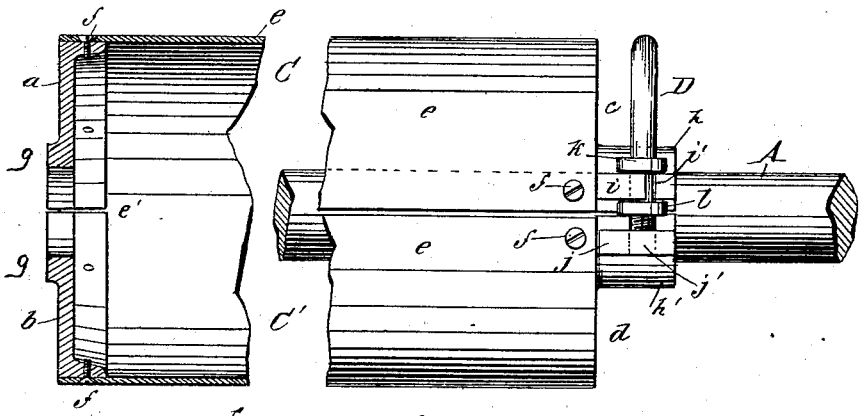
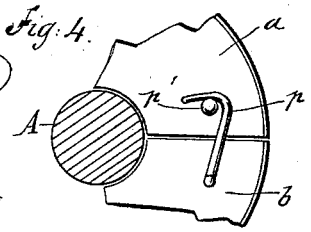


Fig. 4.



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UNITED STATES PATENT OFFICE.

HARRISON UNDERWOOD AND SHARLES SCHWEIZER, OF NEW YORK, N. Y.

CLOTH-BEAM FOR LOOMS.

SPECIFICATION forming part of Letters Patent No. 342,148, dated May 18, 1886.

Application filed February 26, 1885. Serial No. 157,080. (No model.)

To all whom it may concern:

Be it known that we, HARRISON UNDERWOOD and SHARLES SCHWEIZER, both of the city, county, and State of New York, have invented certain new and useful Improvements in Cloth-Beams for Looms, of which the following is a full, clear, and exact description.

This invention consists of a cloth-beam upon which cloth is to be wound as it is woven, and from which it is to be subsequently removed, constructed in two corresponding semi-cylindrical parts attachable to and detachable from a revolving shaft, and provided with an outer casing, substantially as hereinafter described and shown.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 represents an end elevation of our improved cloth-beam mounted upon a revolving shaft, shown in section, on the frame of a loom for weaving. Fig. 2 represents two fragments of a sectional cloth-beam in elevation, the outer casing thereof being in section on one of the fragments to show its thickness and the screws by which it is secured to the beam, one of the fragments being mounted upon a supporting-shaft, to which it is clamped. Fig. 3 represents a fragment of one end of a cloth-beam, showing a clamping device thereon in elevation, by which the sectional beam is to be clamped upon a supporting-shaft, a section of which shaft is also shown in elevation. Fig. 4 is a detail view representing a hook and pin, by which the two semi-cylindrical parts forming the beam are hooked together at the ends opposite to the ends on which are hubs to be clamped to the shaft, the shaft being shown in section.

A in the accompanying drawings represents a shaft supported in suitable bearings on the frame of a loom for weaving cloth. Upon this shaft is mounted our improved cloth-beam, which is composed of two corresponding semi-cylindrical parts, C C′, which are clamped to the shaft A by means of two semi-cylindrical hubs, *h h′*, thereon, so as to be revolved to receive the web of cloth as it is woven and delivered to the beam by the loom.

Projecting laterally from the hubs *h h′* are flanges *i j*, to which is fitted a clamping-screw, D. This screw D is provided with a shoulder, *k*, and collar *l*, to receive between them the flange *i* of the hub *h*. The lower end, *j′*, of this clamping-screw D terminates with a screw-thread to engage with a corresponding female screw formed in the flange *j*, by means of which the two flanges *i j* are drawn together to clamp the hub formed of the two semi-cylindrical parts *h h′* around the shaft A, as represented in Fig. 1.

In order to introduce the clamping-screw D into the flanges *i j*, so as to draw the two hubs *h h′* together to clamp around the shaft A, the flange *i* is recessed, so as to receive the shank of the screw D between the shoulder *k* and collar *l*, as shown in Fig. 1.

When it is desired to loosen the end pieces, *a b c d*, of the hubs *h h′*, so that the beam may revolve upon the shaft independently, the collar *l* serves to spread the flanges *i j* apart when the clamping-screw D is turned outward, as represented in Figs. 1 and 2. The two semi-cylindrical parts C C′ are provided with the hubs *h h′* upon one of their ends only, their opposite ends being connected by a hook, *p*, and pin *p′*, as shown in Fig. 4. The semi-cylindrical parts C C′ are covered with a thin outer casing, *e*, of metal, with its two ends terminating at the edges of the parts C C′ on the side next to the clamping device, and secured to the end pieces, *a b c d*, of the parts C C′ by screws *f* along their edges, as shown in Figs. 1, 2, and 3. By this casing *e* the two part C C′ are held together on the side *e′* when the hubs *h h′* are loosened on the shaft A, so that the beam may revolve independently on the shaft and be removed therefrom and replaced at pleasure.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

A cloth-beam for looms, consisting of two corresponding semi-cylindrical parts, C C′, provided, respectively, with sectional hubs *h h′*, projecting from their ends, with lateral flanges *i j*, and having a clamping-screw, D, having a shoulder, *k*, and collar *l*, substantially as and for the purpose herein set forth.

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