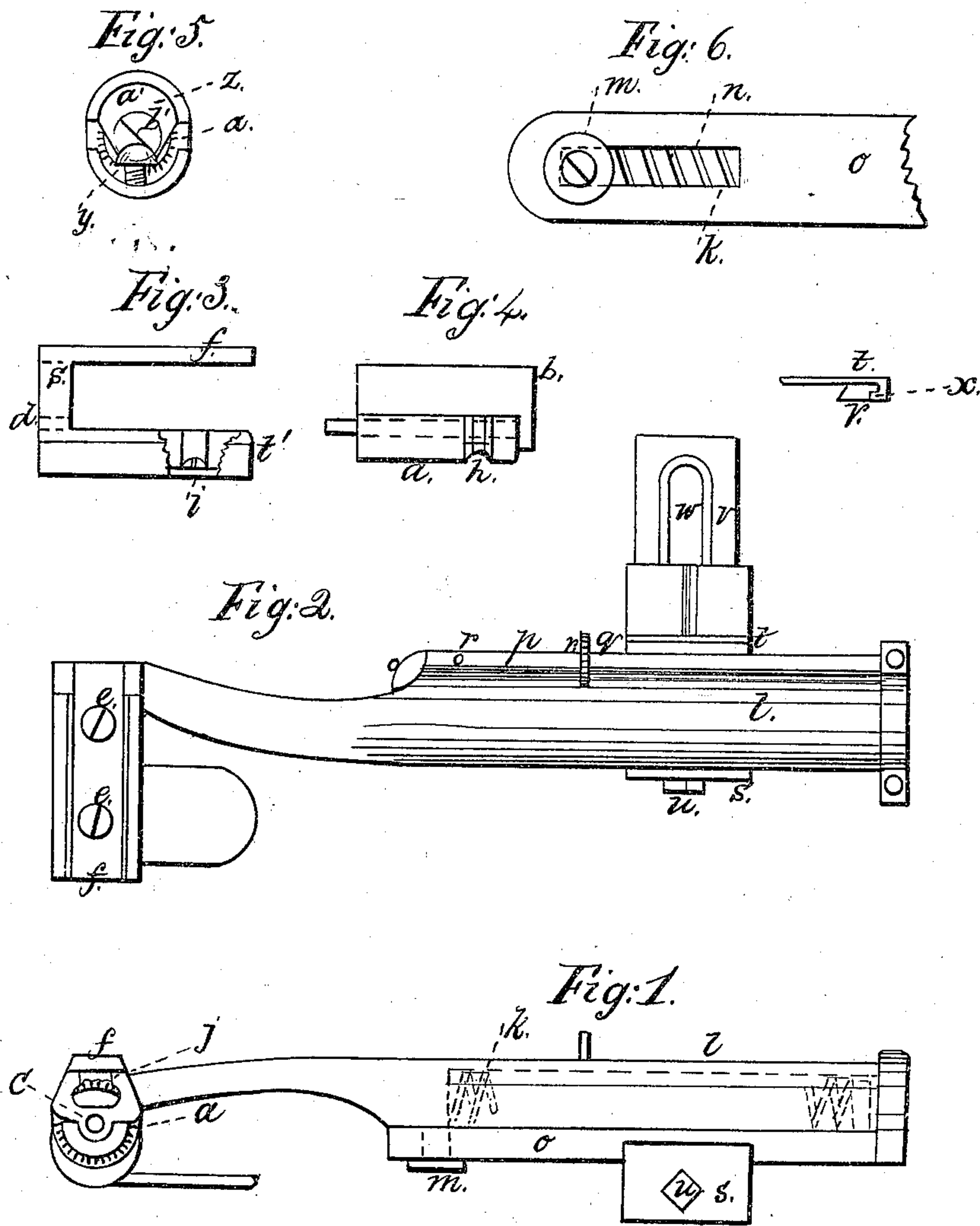


A. H. Gilman.

Loom Temple.

N^o 104,137.

Patented Jun. 14, 1870.



Witnesses.

Geo. E. Bird.
Wm. H. Clifford.

Inventor.

A. H. Gilman
Per Wm H. Clifford Atty.

United States Patent Office.

ALBERT H. GILMAN, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 104,137, dated June 14, 1870.

IMPROVEMENT IN LOOM-TEMPLE.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, ALBERT H. GILMAN, of Boston, in the county of Suffolk, in the State of Massachusetts, have invented a new and useful Improvement in Loom-Temples; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making part of this specification, in which—

Figure 1 is a side elevation.

Figure 2 is a top plan.

Figure 3 is a detail of the removable casing, with a portion broken out, showing the rib in the trough.

Figure 4 shows removable case and groove in roller.

Figure 5 is an end view of the trough, showing adjustable end and removable end to top piece or cap.

Figure 6 is a bottom view of a portion of the stock, showing the slot, the spiral spring, and the stud.

Same letters show like parts.

My invention relates to certain improvements in loom-templates, and consists in an improved method of hanging and holding in place the roller.

In my invention a common wooden roll, having points thereon, is employed, as seen at *a*.

The shaft upon which this roller turns is set in the casing *b*, the inner end of said shaft being rigidly attached in said casing, as shown at *c*. The other end of the shaft enters the aperture *d*, as common.

The casing *b* is removable, and, when placed in position, is secured by the screws *e e*.

These screws pass down through the plate *f*, which may be either cast as a part of the shank *s'*, or separate, and then bolted thereto, for convenience in manufacture, but is not intended to be removed when the casing and roller is taken out; but, at such times as the screws *e e* are removed, the casing, with the roller, may then be withdrawn, the plate *f* still remaining in place.

The roller has a groove, *h*, and the trough *t'* a rib, *i*, entering, to some extent, said groove.

The purpose of this is to keep the cloth straight, as it passes through the temple, and has this advantage over the closed end of the trough, for this purpose, that it presses the cloth upon both sides of the rib, and creates no strain or attrition upon the cloth, as is the case where it is turned up over the closed end of the trough.

The convenience of my improved casing, for the purposes of removal, may be seen from a comparison with those temples in which the entire cap must be removed, and the shaft of the roller pushed out of the outer end of the roller before the roller can be removed.

The inner end of the casing *b* may be left open, as shown at *j*, for convenience of oiling the shaft of the roller.

The spring *k*, from which the reciprocating motion is obtained, has frequently to be oiled, and it often happens, when the spring is compressed, that the lubricating substance is spattered upon the cloth, which necessitates the washing of it for the removal of the stains.

To obviate this, I envelope the spring in a covering, as shown at *l*, which covering may either be a part of the shaft itself or connected therewith.

In my invention the shaft does not extend down through the spring, but merely presses against the upper end thereof, and is fitted with a stud, *m*, and the stand *o* is provided with a slot, *n*, for a guide.

Hitherto the shank has been usually guided by two ears rising from the stand, with a bar extending across the top, and resting on the top side of the shank.

This bar has a V-shaped projection, entering a V-shaped recess, to keep the temple steady, and prevent any twisting motion of the shank. This is accomplished in my invention by the stud and slot.

Moreover, it has been usual, when the spring is compressed and the roller casing drawn back, in order to keep them in such position, to insert a short plug between the bar that extends between the two ears of the stand and the projection on the shank against which the upper end of the spring presses. I accomplish this by means of the lip *p*, the holes *r r*, in said lip, and stand *o*, and the pin *q*.

I attach my improved temple to the loom by means of a clutch, consisting of the fixed jaw *s*, movable jaw *t*, and the screw *u*.

The movable jaw slides on the base *v*, and is held there by means of a groove and lip, as illustrated at *x*.

w shows a slot in the base of the clutch, by which it may be bolted or screwed to the loom.

y shows an adjustable screw in the trough, which can be regulated to suit the different thicknesses of cloth, by screwing the same up and down.

In fig. 5 there is a removable end piece *a'*. This end piece may have a lip and shoulder to fit over the end of the fixed cap.

Through the end piece *a'* passes the shaft of the roller to the other end of the casing, and the same is secured rigidly in the outer end of the casing.

The whole is secured by means of the screw-head *b'* on the projecting end of the shaft.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination, with the plate and trough, of the movable casing *b*, having the shaft *c* rigidly con-

nected therewith, to carry the roller *a*, the free end of the shaft being adapted to enter a hole in the end piece which unites the trough with the plate.

2. In combination with a loom-temple, as described, the adjustable screw *y* at the end of the trough *t*, to accommodate it to the various thicknesses of cloth, as set forth.

3. The sliding covering-shank *l*, having the lip *p*, and provided with holes *r*, combined with the stand

o, having holes to receive a pin, *g*, so that the temple-casing may be held back when desired.

4. The combination and arrangement of the parts *t u v w x*, with a loom-temple, as described, to form a clutch, as set forth.

A. H. GILMAN.

Witnesses:

SEWALL S. W. FOLSOM,
EDWARD E. WOODMAN.