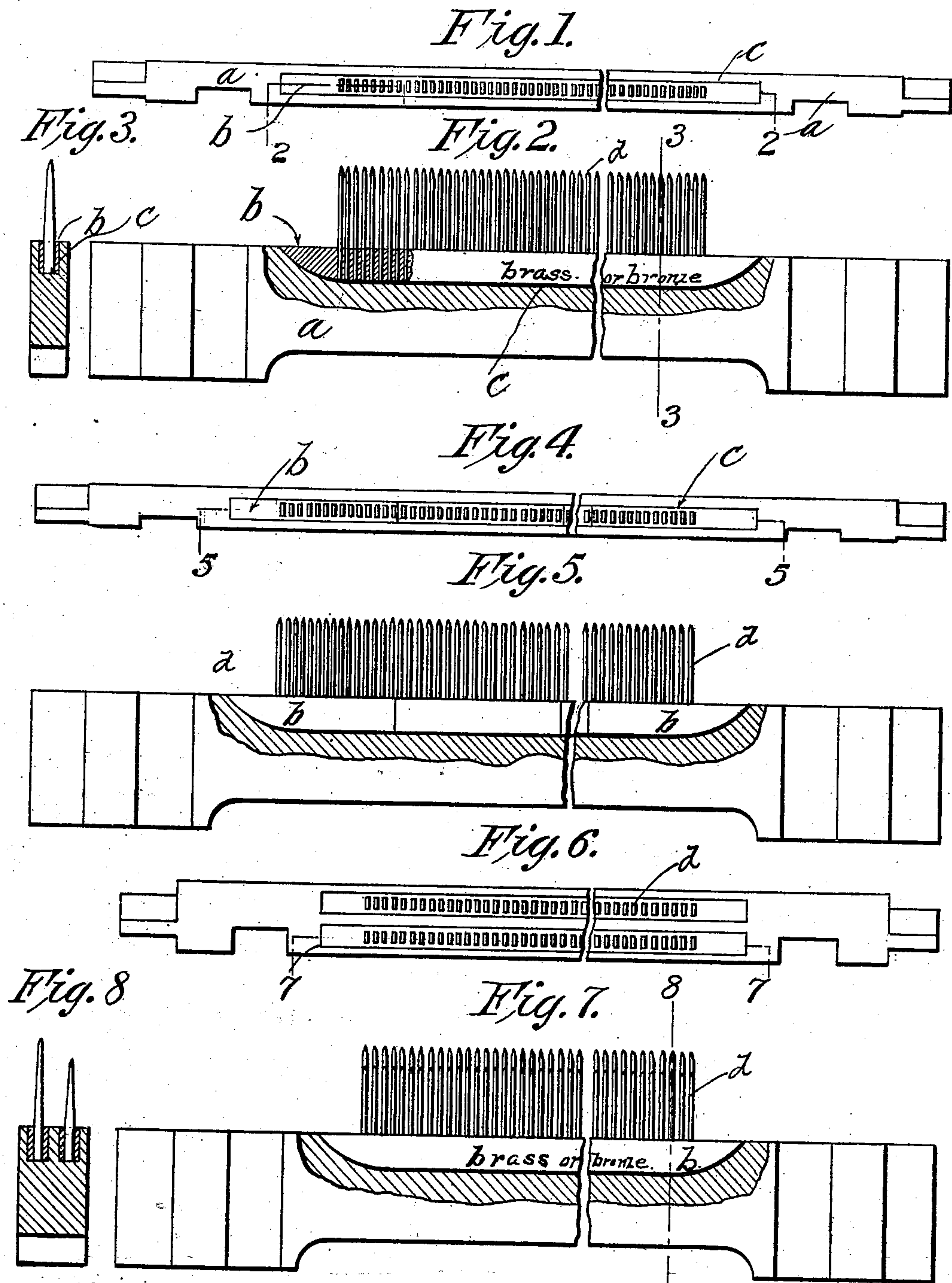


899,280.

Patented Sept. 22, 1908.



Witnesses:
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UNITED STATES PATENT OFFICE.

ANTHONY YOUNG, OF NORTHAMPTON, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO
DAVID H. YOUNG, OF HOLYOKE, MASSACHUSETTS.

FALLER-BAR.

No. 899,280.

Specification of Letters Patent.

Patented Sept. 22, 1908.

Application filed February 2, 1906. Serial No. 299,140.

To all whom it may concern:

Be it known that I, ANTHONY YOUNG, a citizen of the United States of America, residing at Leeds, in the city of Northampton, in the county of Hampshire and State of Massachusetts, have invented new and useful Improvements in Faller-Bars, of which the following is a specification.

This invention relates to improvements in faller-bars of all descriptions for treating spun silk or other fabric, and it has for one of its objects to provide an improved means for securing the metallic gill pins or teeth to the faller-bar.

Another object of my invention is to provide a faller-bar constructed to receive and support a comb bar provided with gill pins in such a manner that the comb bar will not be subjected to lateral strains but that all lateral strains will be placed upon the faller-bar.

A still further object is to accomplish the foregoing functions without weakening the faller-bar by boring or cutting out portions thereof.

It is still further designed to improve the type of faller-bar illustrated in United States Letters Patent to Clarkson No. 476,785, dated June 14, 1892.

Heretofore it has been common practice to cut away a portion of the faller-bar, as shown in the patent referred to, in order to secure the gill pins to the faller-bar by drilling a series of small holes in the top of the bar and opening into a cut away portion on the side of the faller-bar, as shown in said Clarkson patent, and then driving the pins into these holes. The serious defects of this method of securing the pins to the bar is that in case one or more of the pins should happen to break, it is difficult to drive out the remaining broken part of the pin. These serious and expensive defects as they now exist in this class of machines has led to my improvement.

The invention consists broadly in providing a faller bar with a groove adapted to receive and protect the comb bar against lateral strains, there being means provided whereby the bars may be removably secured together so that the comb bar may be quickly disengaged from the faller-bar to permit of remedying any accident that might occur to the gill pins.

In the drawings:—Figure 1 is a top plan view of my improved faller-bar showing the removable brass or bronze comb-bar. Fig. 2

is a side elevation showing the faller-bar with the milled groove and the removable brass or bronze comb-bar carrying the steel pins or teeth and inserted in the grooves thereof. Fig. 3 is a vertical section on the line 3—3, Fig. 2, showing the comb-bar embedded in the steel bar and flush with the upper surface of the same. Fig. 4 is a top plan view of the improved comb-bar which is composed of three pieces, while Fig. 5 is a side view of Fig. 4 and showing the divided comb-bar in side elevation, a section being taken on the line 5—5 of Fig. 4. Fig. 6 is a top plan view showing a faller-bar carrying two sets of removable comb-bars. Fig. 7 is a side view of one of the comb-bars shown in Fig. 6, the section being taken on the line 7—7, Fig. 6. Fig. 8 is a vertical sectional view on the line 8—8, Fig. 7, showing the two brass bars carrying the two sets of gill-pins or teeth.

Referring more particularly to the accompanying drawings, the reference character *a* indicates a steel or other faller-bar; *b* designates a brass, bronze, or other comb-bar which is secured in any suitable manner in the groove *c* of the faller-bar. One method of securing the bars together resides in pouring melted solder along the joints between the bars. This comb-bar carries the teeth or gills *d*. The advantage of this soldering process is that when a tooth or gill becomes broken and a new one is to be inserted into the comb-bar, it is only necessary to slightly heat the bar *a*, softening the solder when the comb-bar can be readily removed and a new tooth or gill inserted and the comb-bar replaced again in the groove *c*. In the event that the comb-bar *b* becomes broken the ragged end of the same can be readily squared off as shown in Figs. 4 and 5 and one piece fitted into the groove, or the comb may be made in two or more sections, as shown in these figures. Thus the whole bar *a* can be used over and over again in case of breakage of the teeth or gills.

The comb bar is preferably curved at its opposite ends as shown, as being more convenient and quicker to manufacture when forming the groove *c*, as readily understood.

I may also use two sets of comb bars, as shown in Figs. 6, 7 and 8, if necessary, in order that the liability of breakage may be reduced and stoppages of the machines lessened.

As stated in the foregoing, it is one of the

essential features of the invention to so associate the comb bar with the faller-bar that the former is protected by the latter from lateral strains incident to the operation of the machines in which my invention is employed, and whereby all lateral strains are thrown upon or taken by the faller-bar.

What is claimed is:—

1. A faller-bar having a groove, and a comb-bar provided with gill pins and fitted wholly within the groove and protected thereby against all lateral strains.

2. A faller-bar having a longitudinal groove, and a comb-bar provided with gill pins and fitted wholly within the groove and protected thereby against all lateral strains,

and means whereby said comb-bar may be removably fastened in said groove.

3. A faller-bar having a longitudinal groove, and a sectional comb-bar provided with gill pins and fitted wholly within the groove and protected thereby against all lateral strains.

4. A faller-bar having longitudinal grooves, and a comb-bar fitted wholly within each groove and protected thereby against all lateral strains, each comb-bar carrying gill pins.

ANTHONY YOUNG.

Witnesses:

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