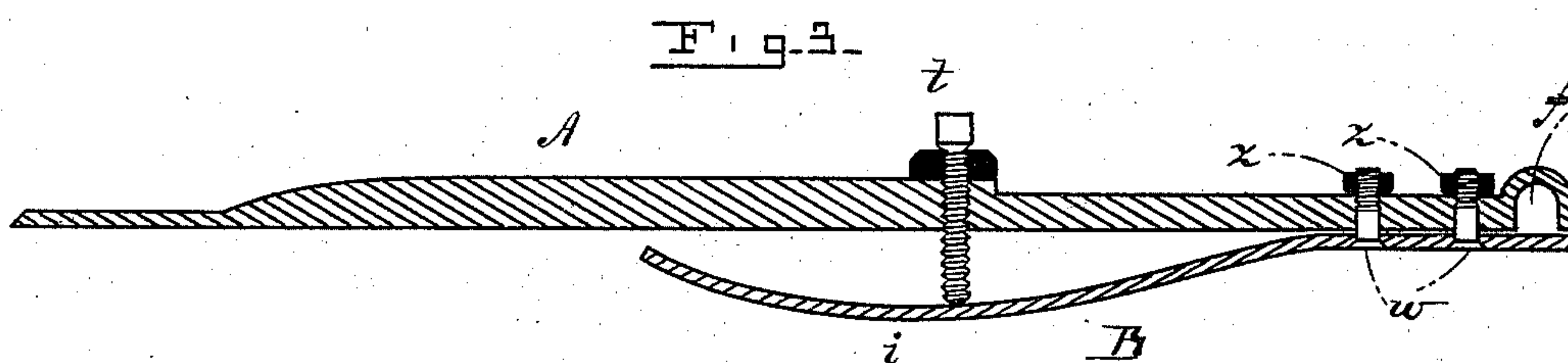
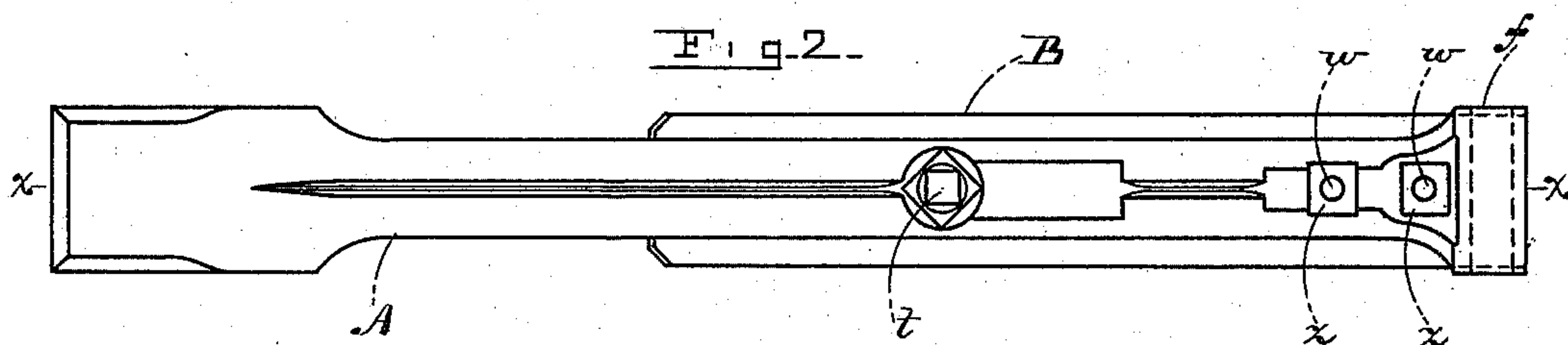
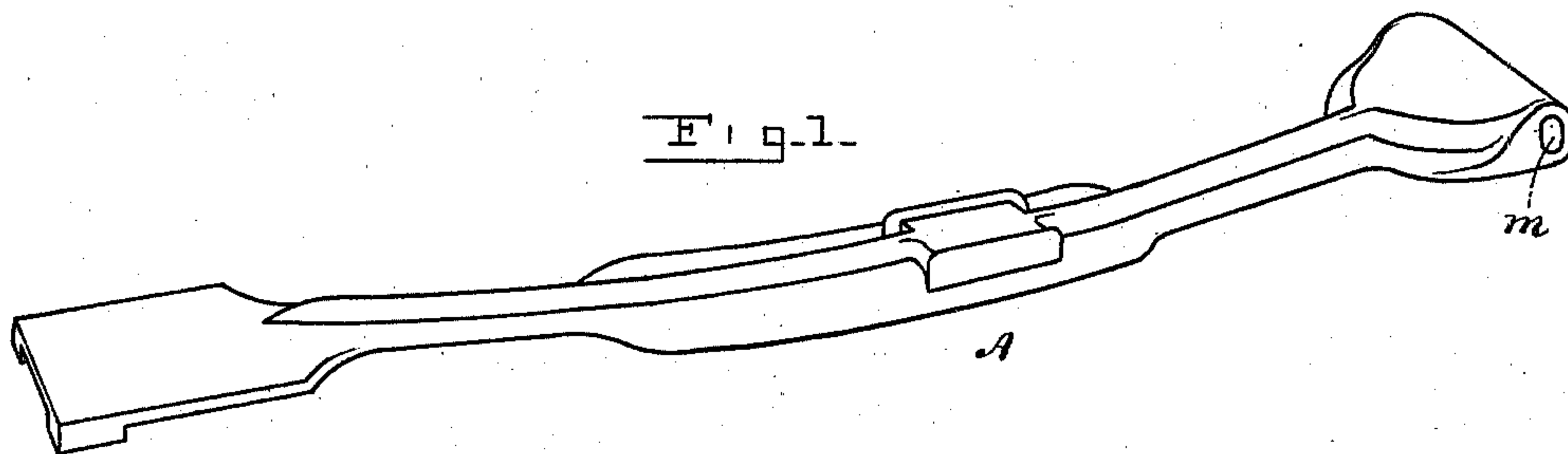


(No Model.)

H. BARDSLEY.  
SHUTTLE BINDER FOR LOOMS.

No. 385,338.

Patented July 3, 1888.



WITNESSES:  
C. M. Spurney.  
L. W. Hubbard.

INVENTOR=  
Henry Bardsley.  
BY R. A. Shaw, Jr.,  
ATTY-S.

# UNITED STATES PATENT OFFICE.

HENRY BARDSLEY, OF FITCHBURG, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO WILLIAM BARDSLEY, OF SAME PLACE.

## SHUTTLE-BINDER FOR LOOMS.

SPECIFICATION forming part of Letters Patent No. 385,338, dated July 3, 1888.

Application filed January 10, 1888. Serial No. 260,328. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY BARDSLEY, of Fitchburg, in the county of Worcester, State of Massachusetts, have invented a certain new and useful Improvement in Shuttle-Binders for Looms, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which said invention appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is an isometrical perspective view of an ordinary shuttle-binder; Fig. 2, a top plan view of my improved shuttle-binder; and Fig. 3, a vertical longitudinal section taken on line *x x* in Fig. 2.

Like letters and figures of reference indicate corresponding parts in the different figures of the drawings.

In ordinary shuttle-binders of this class the pin on which the binder is pivoted or journaled is inserted in a hole, *m*, formed in one end of the body, thus rendering it difficult to attach or detach the binder readily, and also increasing the cost of construction, the hole having to be drilled after the binder is made. The face of the binder and also the heel around the pin-hole wear away rapidly, and there is no means provided for compensating therefor, or of adjusting the binder to adapt it to shuttles of different sizes.

My invention is designed to obviate these and other objections and difficulties; and to that end I make use of means that will be readily understood by all conversant with such matters from the following explanation:

In the drawings, A represents the body, and B the face-plate.

The body is preferably formed straight, or approximately so, and is provided with an open groove, *f*, in its heel. The face-plate is bent or curved outwardly, as shown at *i*, and is secured to the body A by bolts *w* and nuts *z*, one end of said plate being so formed and arranged as to extend over and close the groove *f*, thereby converting the same into a hole for the binder-pin. A set-screw, *t*, passes transversely through the body A, said screw engaging the plate B and rendering the same adjustable to adapt the binder to shuttles of different sizes.

Having thus explained my invention, what I claim is—

1. A shuttle-binder comprising a body provided with a groove in its heel for the pivot-pin and a curved face plate detachably secured to said body, said face-plate extending past said heel-groove for closing it, substantially as described.

2. The combination of a shuttle-binder body provided with a groove in its heel for the pivot-pin, a face-plate detachably secured to said body and extending over said groove for closing it, and a set-screw passing through said body in contact with said face-plate for adjusting the latter, substantially as described.

HENRY BARDSLEY.

Witnesses:

T. K. WARE,  
CHAS. E. WARE.