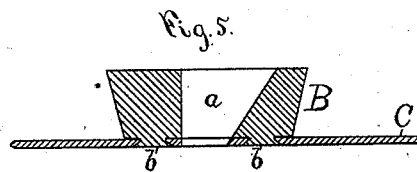
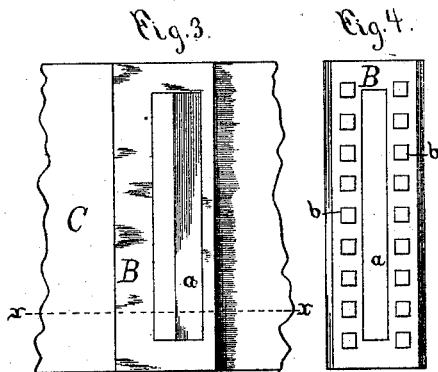
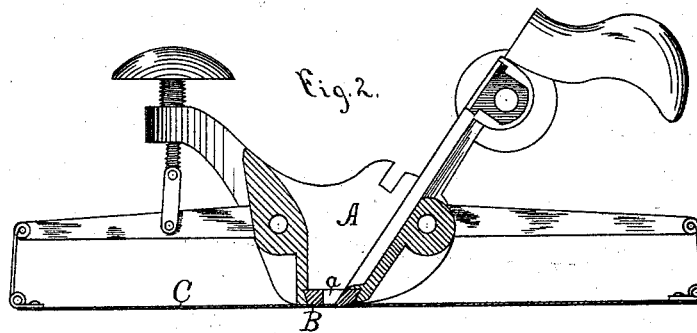
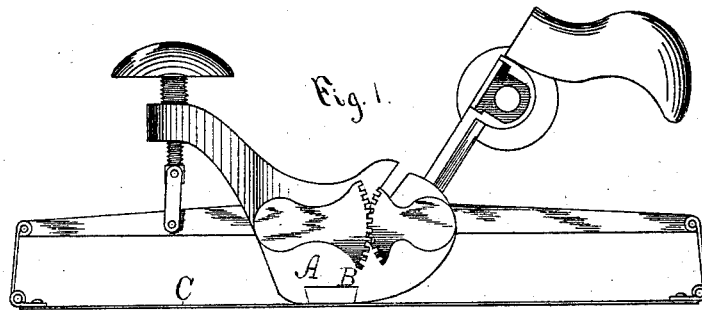


S. D. SARGENT.
Flexible-Faced Plane-Stock.

No. 216,577.

Patented June 17, 1879.



Witnesses:
H. B. Thomson.
Samuel D. Burr

Inventor:
Samuel D. Sargent
By James Shepard Atty.

UNITED STATES PATENT OFFICE.

SAMUEL D. SARGENT, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO
STANLEY RULE AND LEVEL COMPANY, OF SAME PLACE.

IMPROVEMENT IN FLEXIBLE-FACED PLANE-STOCKS.

Specification forming part of Letters Patent No. **216,577**, dated June 17, 1879; application filed
April 16, 1879.

To all whom it may concern:

Be it known that I, SAMUEL D. SARGENT, of New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Flexible-Faced Plane-Stocks, of which the following is a specification.

My invention consists of the combination, in a flexible-faced plane-stock, of the body of the stock, having a transverse recess adjacent to the throat, with an independent throat-piece fitted to said recess and having the flexible face attached, as hereinafter described; also, in the throat-piece, of malleable metal, independent or otherwise, and provided with a series of lugs rigidly formed in one and the same piece with the throat-piece, in combination with the flexible face-plate having a series of holes through which said lugs pass, as hereinafter described.

In the accompanying drawings, Figure 1 is a side elevation of a flexible-faced plane-stock which embodies my invention. Fig. 2 is a longitudinal section of the same through one side of the stock. Fig. 3 is a detached portion of the flexible-faced plate and attached throat-piece of the same. Fig. 4 is a detached underside view of said throat-piece, and Fig. 5 is an enlarged sectional view on line *xx* of Fig. 3.

The flexible-faced stock, the mechanism for adjusting said face-plate, and the mechanism for adjusting the plane-iron are, with the exception of the parts hereinafter described, substantially the same as shown in the two patents to H. M. Clark, September 25, 1877; but they may be of any other style or kind.

The body of the stock A, I make of iron and with a dovetailed groove transversely across the bottom at the point where the throat *a* is designed to be located.

A dovetailed throat-piece, B, is fitted snugly into said groove, as shown in Figs. 1 and 2. This throat-piece has the ordinary throat *a* formed in it, through which throat the cutting-bit or plane-iron extends.

The flexible face-plate C is firmly secured to said throat-piece before it is inserted in the stock.

Heretofore, so far as I know, the flexible face-plates of circular plane-stocks have been

secured directly and permanently to the stock, and generally by screws the heads of which were ground or polished off, so as to take out the slot therein. A face-plate so secured could not be removed for repairs by an ordinary carpenter, and in any event could only be removed with more or less difficulty.

I intend to have the stocks and throat-pieces made by machinery and all alike, so that in case it is desired to remove the flexible face-plate and replace it with a new one it is only necessary to disconnect the ends of the face-plate and drive out the throat-piece.

A new face-plate can be ordered from the factory and inserted in its place, all of which can be done by any ordinary carpenter or mechanic, and without returning the plane-stock to the factory.

Thus it will be seen that the throat-piece and its attached face-plate are both attachable and detachable from the stock, whereby I call the throat-piece an independent one.

So far as the above feature of my invention goes the face-plate may be secured to the independent throat-piece by screws, rivets, or in other ordinary manner; but I prefer the method hereinafter described, and which constitutes the second feature of my invention.

I make the throat-piece of some kind of malleable metal, (good malleable iron will answer,) and with a series of lugs, *b*, upon its under side. A mill is then run over the surface of the throat-piece both lengthwise and crosswise, to mill the entire surface, except that occupied by the lugs, leaving them square, as shown in Fig. 4.

A series of holes of corresponding shape and location are punched in the face-plate, which holes are countersunk on the face side of the plate by a proper revolving tool. The lugs of the throat-piece are then driven into the holes in the plate, their ends upset or riveted, and then polished off, when the plate is ready for use.

The under face of the throat-piece outside of the lugs may be slightly rounded, and said piece may be made so thick that the face-plate will project slightly below the other parts of the stock, so that a good convex curve may be given to the face of said plate.

A few of the advantages of the solid lugs on the throat-piece are as follows, viz: Being short and solid, there is only the thickness of the plate for them to stretch, give, or work in, whereby they form a much firmer fastening than screws or rivets, which are necessarily longer, and the lugs may be set nearer to the throat *a*, especially with reference to the beveled side of the throat, thereby allowing the greatest possible freedom in bending the face-plate of the stock, while at the same time it is secured firmly.

I have herein described this second feature of my invention as embodied in an independent throat-piece; but if desired the same rigid lugs might be formed contiguous to the throat in the stock, the stock and throat-piece being made of a single piece of malleable iron, in which case the throat-piece would not be an independent one, but all the advantage of a firm fastening, by reason of short lugs and of fastening the face-plate near the edge of the throat, would be embodied in such a stock.

I claim as my invention—

1. In a flexible-faced plane-stock, the body of the stock, having a transverse recess adjacent to the throat, in combination with an independent throat-piece fitted to said recess and having the flexible face attached, substantially as described, and for the purpose specified.

2. In a flexible-faced plane-stock, the throat-piece, of malleable metal, independent or otherwise, and provided with a series of lugs rigidly formed in one and the same piece with the throat-piece, in combination with the flexible face-plate having a series of holes through which said lugs pass, substantially as described, and for the purpose specified.

SAMUEL D. SARGENT.

Witnesses:

JAMES SHEPARD,
WILL. B. THOMSON.