T. H. BRADY.

SHEARS FOR TINSMITHS.

No. 193,217. Patented July 17, 1877.

Fig. 1.

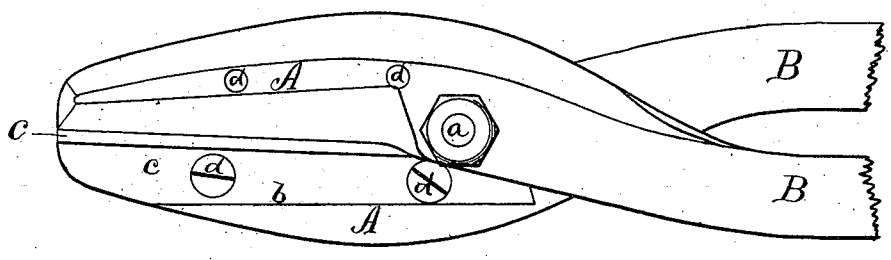


Fig. 2.

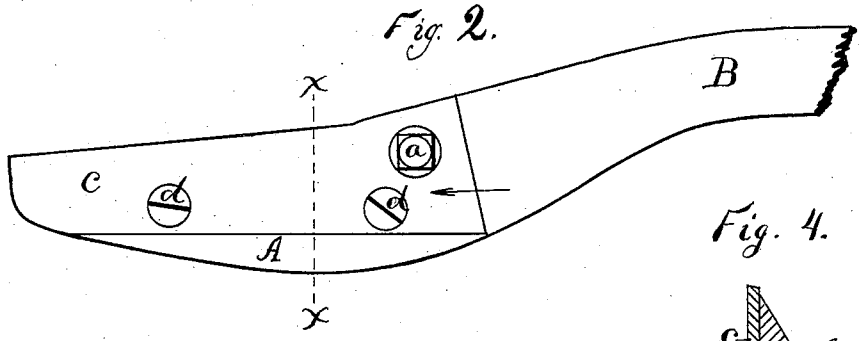


Fig. 4.

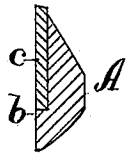
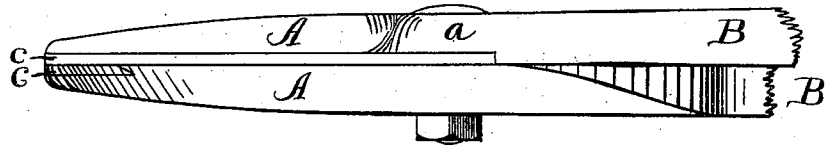


Fig. 3.



Witnesses.
H. A. Gale.
L. B. Curr.

Inventor.
Thomas H. Brady.
By James Shepard
Atty.

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

THOMAS H. BRADY, OF NEW BRITAIN, CONNECTICUT.

IMPROVEMENT IN SHEARS FOR TINSMITHS.

Specification forming part of Letters Patent No. **193,217**, dated July 17, 1877; application filed January 31, 1877.

To all whom it may concern:

Be it known that I, THOMAS H. BRADY, of New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Tinsmiths' Shears, of which the following is a specification:

The invention is adapted to the class of shears employed by tinmen and operated by hand, including both bench and snip shears, and consists of providing the blades with thin removable faces, constructed as hereinafter described, so as to extend back of the joint or hinge of the blades.

In the accompanying drawing, Figure 1 is a side view of a pair of shears which embody my invention, the same being represented with the greater portion of the handles broken away. Fig. 2 is a face view of one blade thereof and a portion of the handle. Fig. 3 is an edge view of a pair of said shears; and Fig. 4 is a section of the end of one blade, taken on the line *x x* of Fig. 2.

I form the body of the blades and handles of these shears of either wrought-iron or cast malleable metal, and, with the exception of the face of the blades, in substantially the usual form.

The main portion of the blades A A are formed of one and the same piece of metal, with their handles B B, and on their face are provided with a longitudinal depression, reaching back of the joint *a*, upon which the blades turn, and terminate in a shoulder, *b*, running lengthwise with the blade at its back edge, as clearly shown in Figs. 1, 2, and 4. This depression I fill with a thin removable facing, *c*, of sheet-steel, the same being secured to the blades proper by means of screws *d d*, with one edge resting against the shoulder *b* and the opposite or cutting edge projecting. The screw-heads are sunk into the removable facings so as to be flush therewith. The removable facings *c c*, as well as the depression in the blades, extend back of the joint *a*, thereby making the cutting-edge of the blades continuous, and, in case their fastening-screws should accidentally become loosened, preventing the cutting-edges from shutting against each other.

By extending the removable faces back of the joint *a* the bolt which secures the two blades together necessarily passes through the faces *c c*.

I am aware that detachable steel blades have been applied to pruning and other shears, and such I disclaim.

I claim as my invention—

In tinsmiths' hand-shears the blades A A, having the longitudinal depressions in their faces extending back of the joint and terminating in the shoulder *b*, and the removable steel facings *c c* fitted in said depressions, and receiving the bolt by which the blades are pivoted together, substantially as described, and for the purpose set forth.

THOMAS H. BRADY.

Witnesses:

JAMES SHEPARD,

LYMAN S. BURR.