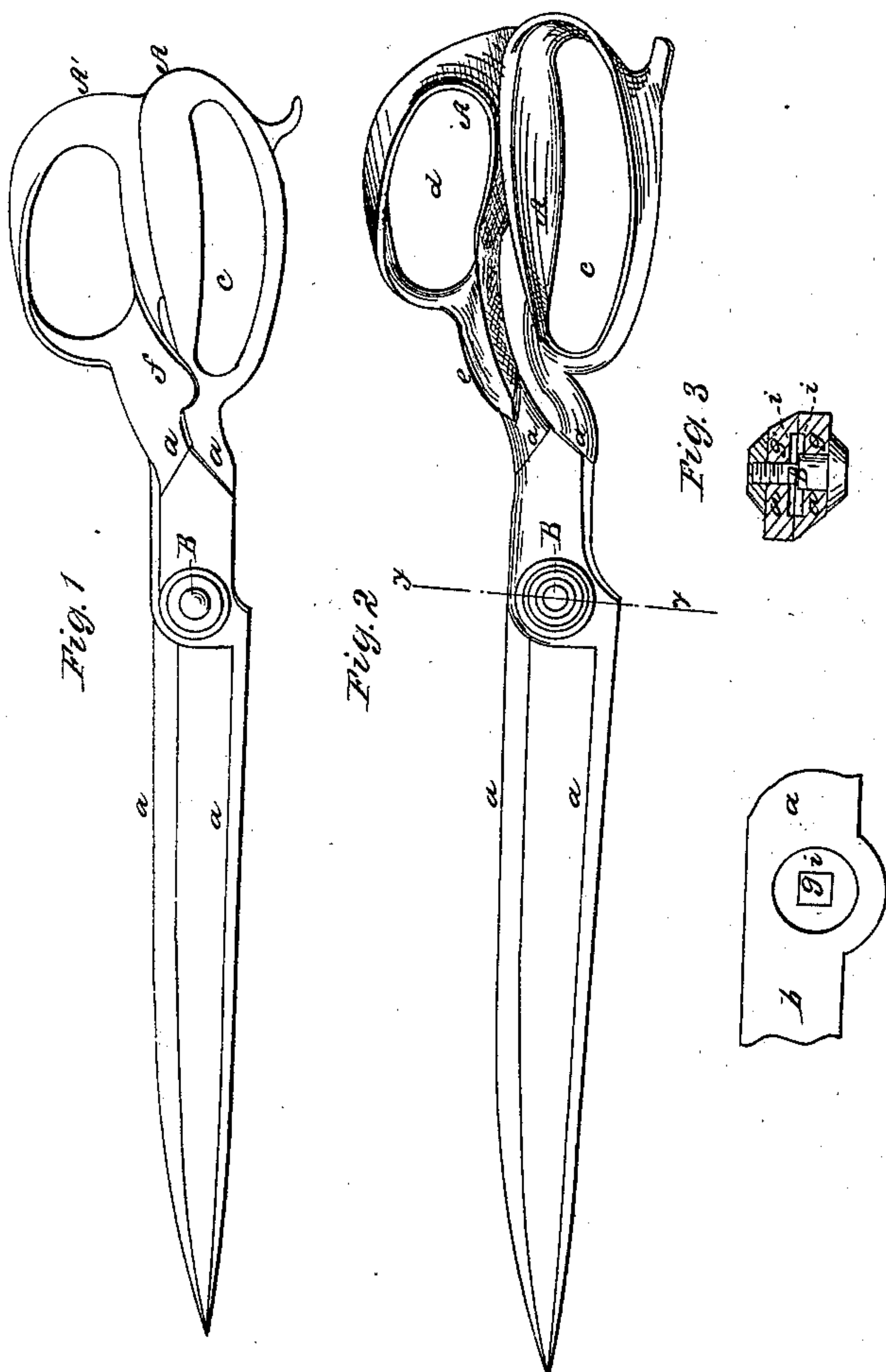


H. Wendt,

Shears.

N^o 80,254.

Patented July 21, 1868.



Witnesses;
W. C. Ashkettle
Wm A. Morgan

Inventor
H. Wendt
per Munn & Co
attorneys

United States Patent Office.

HERMANN WENDT, OF ELIZABETH, NEW JERSEY, ASSIGNOR TO HENRY SEYMOUR AND ROBERT H. SEYMOUR, OF BROOKLYN, NEW YORK.

Letters Patent No. 80,254, dated July 21, 1868.

IMPROVEMENT IN SHEARS.

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, HERMANN WENDT, of Elizabeth, in the county of Union, and State of New Jersey, have invented a new and useful Improvement in Shears; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification, in which—

Figure 1 is a side view of a pair of shears of ordinary construction.

Figure 2 is a side view of a pair of shears, constructed according to my invention.

Figure 3, an inner side view of a portion of one of the blades.

Figure 4, a transverse section of fig. 2, taken in the line $x x$.

Similar letters of reference indicate like parts.

This invention relates to a new and useful improvement in shears for general use, and it consists—

First, in forming the thumb-piece of the eye or loop of the handle, through which the thumb passes, in such a manner that the shears may be operated with far greater facility than hitherto.

Second, the invention consists in a certain means whereby the holes through which the rivet or screw passes, to hold the parts of the shears together, may be formed by punching instead of drilling, which is now a necessity.

At present the rivet-holes cannot be punched, in consequence of the drop which holds the steel to the malleable cast-iron portions coming in contact, in its descent, with the portions of the malleable cast iron through which the rivet or screw passes, and compresses or hardens said portions to such a degree as to preclude punching. This difficulty is fully obviated by my improvement.

A A' represent the handles of the shears, which, with the extensions a , to which the steel b is welded, are of malleable cast iron. The handle A is cast or formed with an eye or loop, c , of usual shape. The handle A' has its eye or loop d about of the usual shape, but the thumb-rest e has a quite different position from that, f , of the ordinary shears, as will be readily seen by referring to figs. 1 and 2. The thumb-rest f extends downward and laps over the upper front part of the eye or loop c , and does not properly support the thumb, while, in my improvement, the rest e inclines but slightly downward, but a trifle below the upper edge of the handle A', in front of the eye or loop d , and is of concave form at its upper surface. In consequence of this, the rest e serves as a better support for the thumb, and the shears may be operated with far greater facility than those of ordinary manufacture.

B represents the rivet or screw, by which the two parts of the shears are held together. This screw or rivet passes through holes $g g$, made through the two parts of the shears. The steel b , (see fig. 3,) is welded to the inner surface of the parts, the steel extending from the points nearly to the holes $g g$. This steel is welded to the parts by means of a drop, and in manufacturing the ordinary shears, the malleable cast iron, around the holes g , will be compressed and hardened by the drop, as the latter necessarily laps over the inner end of the steel.

This hardening of the malleable cast iron at that point renders it necessary to form the holes g by drilling, which is attended with considerable expense, and by which a perfect hole cannot be produced. As the hole in one of the blades requires to be made square, and as a drilled hole is round, it must be squared by filing, and this is rarely or never done in a perfect manner. This difficulty is fully obviated by my improvement, as the square hole may be punched in proper form without any trouble whatever.

In my improvement, I make a recess, i , in the inner surfaces of the malleable cast iron, at the parts where the holes g are to be made, and these recesses, of course, are beyond the reach or action of the drop, and hence the iron within these recesses will be soft, and the holes g may consequently be readily punched, which costs but a trifle compared with drilling.

These recesses may receive any absorbent material, saturated with oil, to keep the rivet or screw well lubricated.

Having thus described my invention, I claim as new, and desire to secure by Letters Patent—

Casting the circular recess *i* in the shear-blade, for the purpose of preventing a drop-hammer from compressing or hardening the metal at the point where the rivet-hole is to be made, whereby the metal within the recess is left soft, in order that the rivet-hole may be formed by punching, as herein shown and described.

The above specification of my invention signed by me, this third day of March, 1868.

HERMANN WENDT.

Witnesses:

STANLEY G. MASON,
JAMES M. HADDEN.