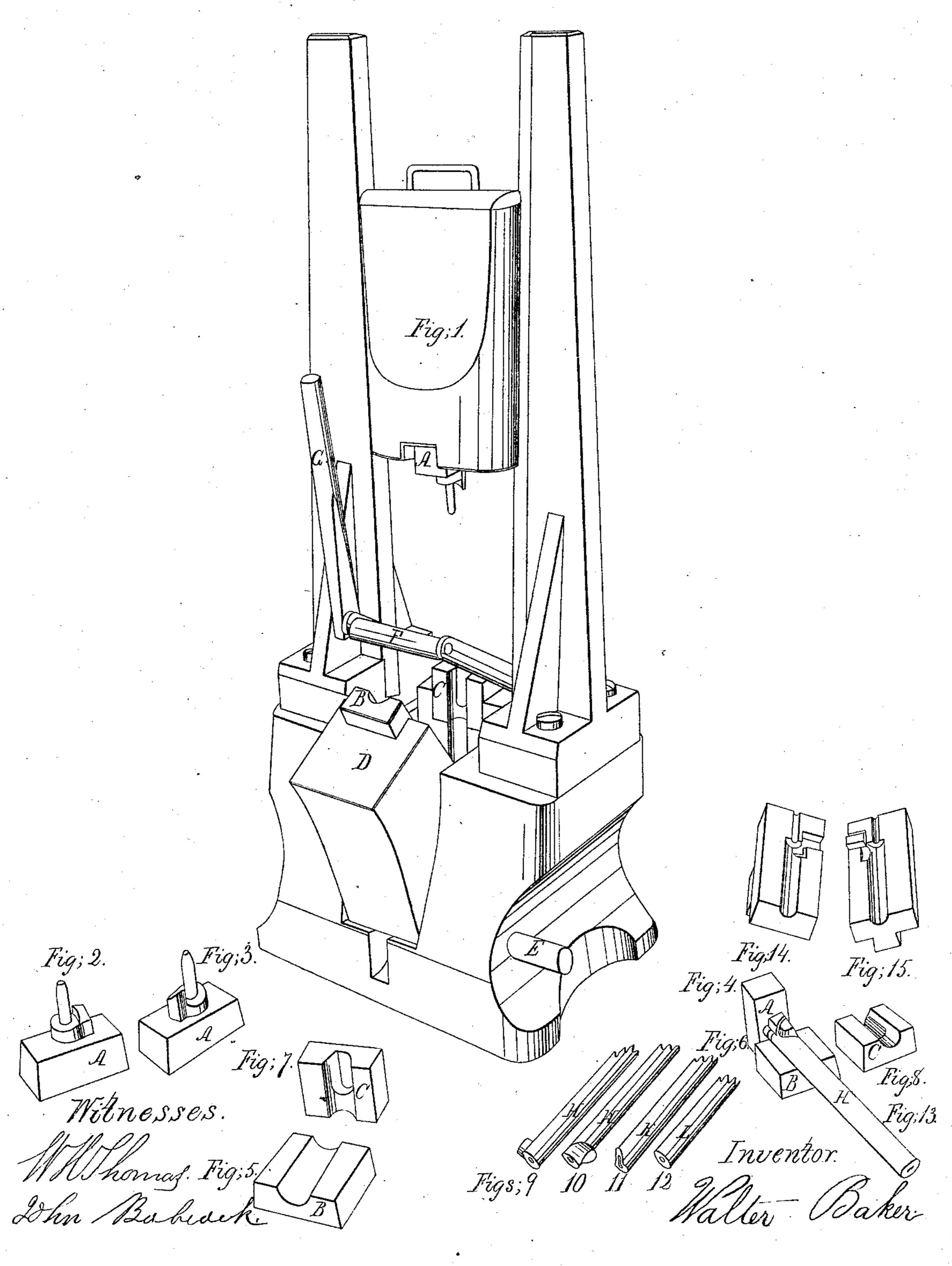
## BORBA

Making Gun-Barrels,

Patented Feb. 23, 1864.

Ni 41,669.



## United States Patent Office.

WALTER BAKER, OF ILION, NEW YORK.

## IMPROVEMENT IN THE MANUFACTURE OF GUN-BARRELS.

Specification forming part of Letters Patent No. 41,669, dated February 23, 1864.

To all whom it may concern:

Be it known that I, Walter Baker, of the village of Ilion, Herkimer county, and State of New York, have invented a new and useful Mode of Coneseating Hollow Gun-Barrels; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which similar letters refer to like parts.

Figure 1 is a perspective view of a set of dies, A BC, (made to form a cone seat on the barrel,) adjusted in a drop-hammer and bed.

The die A, Fig. 1, is fully represented by Figs. 2, A, 3, A, and 4, A; the die B, Fig. 1, by Figs. 5, B, 6, B; the die C, Fig. 1, by Figs. 7, C, 8, C.

The bed of the machine, Fig. 1, has a part, D, operating on a joint-bolt, E, opening or closing the dies B and C, and which is firmly enbraced in its place by the eccentric bar F, operated by the lever G, when closed in position for work. The hollow barrel, Fig. 12, L, is cut off obliquely at the butt, or, which is equivalent, the metal is set over to one side, as represented at K, Fig. 11. The butt-end is properly heated, placed in the machine, Fig. 1, muzzle down, the dies B and C brought together, embracing the butt, the hammer with the die A let fall several times, the dies are opened, and the barrel removed. These operations will form the cone seat on the hollow

barrel without welding, as at H, Figs. 9, 10, 13. The barrel may now be further heated, a rod placed in the boreat the butt, and dropped in finishing dies, Figs. 14 and 15, to correct any unevenness of surface or shape. The positions of the dies A B C, Fig. 1, may be changed, so that either may be in the hammer or in the different die seats. The die A forms the rear side of the cone-seat, the rear end of the barrel, and has a center-pin, which projects into the barrel, the whole forming the butt-end of the barrel. The die B forms the top, front, bottom, and right side of the cone-seat and right side of the barrel. The die B forms the left side of the barrel.

I do not claim as my invention forming a cone-seat by welding a piece onto a barrel solid or hollow, nor upsetting a cone-seat on a solid barrel; but

What I claim as my invention, and desire to secure by Letters Patent as an improved and new article of manufacture, is—

The forming of a solid cone seat upon a hollow gun-barrel from the metal at the butt of the same without welding in the manner substantially as shown and described.

In witness whereof I have hereunto subscribed my name.

WALTER BAKER.

Witnesses:
W. H. Elliot,
E. Roche.