(No Model.)

S. D. NORTH.

MACHINE FOR RECUTTING AXLE SHOULDERS.

No. 547,025. Patented Oct. 1, 1895.

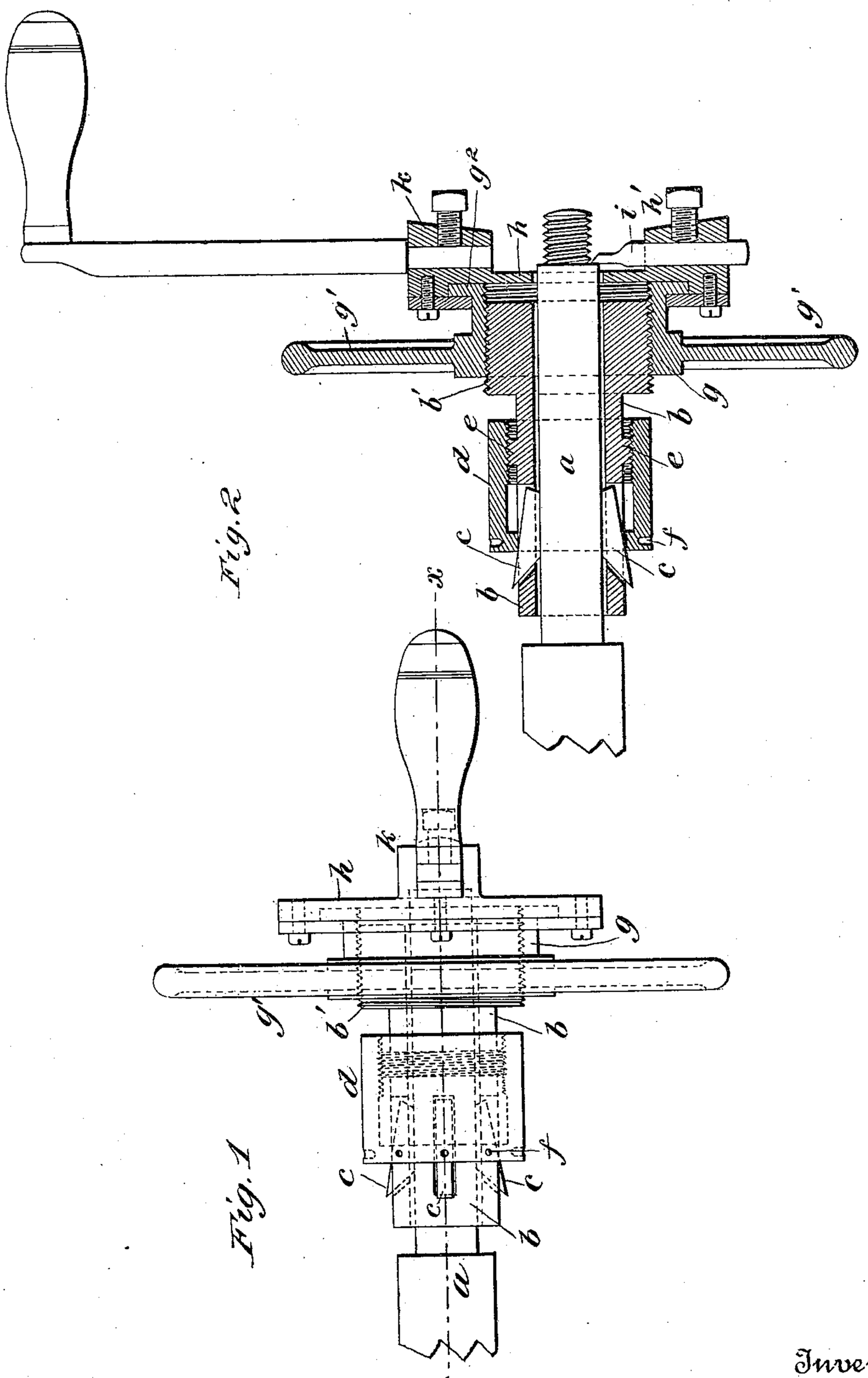

Fig. 2

Fig. 1

Witnesses
J. H. Thompson
Andrew Ferguson

Inventor
Solomon D. North
By W. E. Simonds
Attorney

UNITED STATES PATENT OFFICE.

SOLOMON D. NORTH, OF PLAINVILLE, CONNECTICUT.

MACHINE FOR RECUTTING AXLE-SHOULDERS.

SPECIFICATION forming part of Letters Patent No. 547,025, dated October 1, 1895.

Application filed December 29, 1894. Serial No. 533,273. (No model.)

To all whom it may concern:

Be it known that I, SOLOMON D. NORTH, a citizen of the United States, residing at Plainville, in the county of Hartford and State of Connecticut, have invented a certain new and useful Improvement in Machines for Recutting Shoulders Upon the Ends of Axle-Arms, of which the following is a description, reference being had to the accompanying drawings, wherein—

Figure 1 is an exterior view of the entire tool. Fig. 2 is a view of the same in central longitudinal section on the plane denoted by the broken line *x x*.

The primary object served by this tool is the recutting of the shoulders at the outer extremity of the axle-arms of vehicles, for the purpose of permitting the nut which is commonly borne upon such extremity to be "turned up" a little farther than was originally intended, so as to compensate for endwise wear of the axle-box and co-operating parts. The tool can also be used for other purposes than that above indicated.

In the accompanying drawings, the letter *a* denotes an axle-arm to which the tool is attached.

b denotes a sleeve loosely inclosing the axle-arm.

c denotes a key, of which there are three or more, each lying in a longitudinal slot made for that purpose in the sleeve *b*, and they are nsed for centering the sleeve *b* in place upon the axle-arm and there holding it after it is so centered. These keys are simultaneously and synchronously moved radially toward a common center by means of the compressor-ring *d*, which is interiorly screw-threaded and has that thread co-operating with a corresponding thread upon the collar *e*.

The letter *f* denotes socket-holes, more or less in number, sunk in the compressor-ring for the end of a small wrench-bar, whereby the compressor-ring may be rotated.

The tool, as a whole, is centered and fastened and placed upon an axle-arm by means of the devices and parts so far described. The forward portion of the sleeve *b* carries a screw-thread *b'*, co-operating with a corresponding screw-thread upon the interior of the feed-sleeve *g*, and it is by the rotation of this feed-sleeve *g* upon the axle-arm-inclosing sleeve *b* that the cutting-tool, soon to be described, is fed back and forth. The feed-sleeve is rotated by any suitable means—for instance, feed-wheel *g'*.

On the feed-sleeve is hung the rotary tool-carrier *h*, through the medium of a flange g^2 on the feed-sleeve and corresponding inclosing parts, which are constituents of the tool-carrier. The tool-carrier has a socket (or it may have more than one) *h'*, carrying a cutting-tool *i*. The letter *k* denotes a wrench-socket on the tool-carrier for the insertion of a wrench-bar to rotate the tool-carrier, and with it the cutting-tool, and do the cutting for reshouldering axles.

I claim as my improvement—

In combination, sleeve *b* carrying screw-thread *b'*, keys *c*, compressor-ring *d*, interiorly threaded feed sleeve *g* carrying flange g^2, tool-carrier *h* rotarily hung on flange g^2, tool-socket *h'*, and tool *i*, all substantially as described and for the purposes set forth.

SOLOMON D. NORTH.

Witnesses:
WILLIAM E. SIMONDS,
ANDREW FERGUSON.