C. S. HARTWELL.

Chuck for Turning Whip Stocks.

No. 168,487. Patented Oct. 5, 1875.

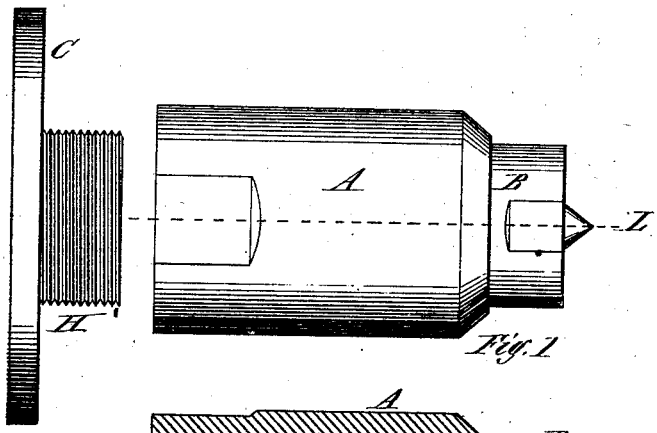

Fig. 1

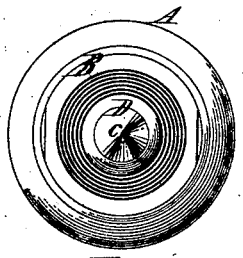

Fig. 2

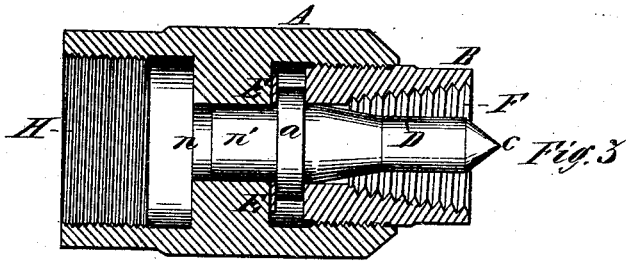

Fig. 3

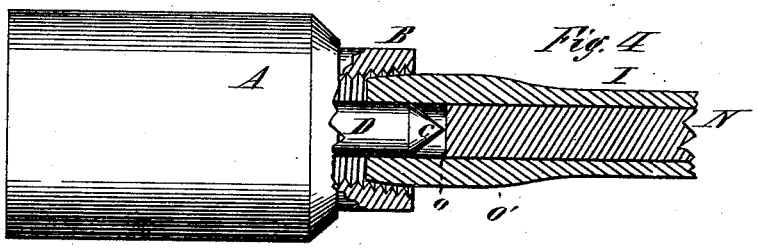

Fig. 4

Witnesses,
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C. E. Buckland

Inventor,
Charles S. Hartwell
By J. A. Curtis,
his atty.

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UNITED STATES PATENT OFFICE.

CHARLES S. HARTWELL, OF WESTFIELD, MASSACHUSETTS, ASSIGNOR TO GEORGE S. PECK AND FRANK GRANT, OF SAME PLACE.

IMPROVEMENT IN CHUCKS FOR TURNING WHIP-STOCKS.

Specification forming part of Letters Patent No. **168,487**, dated October 5, 1875; application filed January 26, 1875.

To all whom it may concern:

Be it known that I, CHARLES S. HARTWELL, of Westfield, in the State of Massachusetts, have invented a new and useful Improvement in Chucks for Turning Whip-Stocks; and that the following is a full, clear, and exact description of the same.

The object of my invention is to furnish a support for the hollow end of a whip-butt while it is being turned, so that it may be turned beyond the end of the spike and the end afterward sawed off without the expense of filling the hollow portion with a plug; and to this end my invention consists of an improved chuck to be used upon the face-plate of a lathe, the elements of the same being a socket with a threaded hole in the end, a hollow holder with a screw-thread inside at one end to hold the whip-butt, and threaded outside at the other end to be turned into the socket, and with a spindle arranged in the center of the holder.

In order that my invention may be fully understood, I will proceed to describe the same.

Figure 1 is a side view of my invention arranged to be attached to the face-plate of a lathe. Fig. 2 is an end view of the same. Fig. 3 is a horizontal section of the same at line L; and Fig. 4 is a side view, showing the holder partially broken away, and a whip-butt, in section, secured thereto for turning.

A is the socket, which may be cylindrical, and provided with a threaded hole, H, to turn it upon the threaded projection H′ of the ordinary face-plate C of a lathe. I have shown this socket as arranged with a hole, *n*, at its center, and a shoulder, E, with a spindle, D, having the end *n′* fitting into the hole *n*, and a shoulder, *a*, setting against the shoulder E in the socket, and the holder B having a tapered hole in the end, which is threaded, as shown at F, and having a screw-thread on the exterior, and turned into the threaded socket against the shoulder or flange *a*, firmly grasping said flange between the inner end of the holder B and the shoulder E of the socket. As thus arranged the spindle is held securely in the center of the holder B.

By the ordinary processes of manufacturing whips those which have a loaded butt contain a spike, N, upon the outside of which pieces of rattan or other similar material are secured, and in order that the rattan or covering I may be finished to the end of the spike they are turned in a lathe to about the point *o′*, and after the whip has been removed from the lathe the stump is whittled off. In order to turn it off to a point nearer the end, however, and save the trouble of whittling off the end, and to finish the butt more uniformly, the ends of the rattan or covering are extended beyond the spike N, and the hollow space filled with a plug, and, after the covering has been turned off beyond the end of the spike, the covering and plug are sawed off. This filling of the hollow end is expensive, however, as they are glued in and the covering strongly wound with thread to more firmly secure it.

The object of my invention is to save this expense, and yet to furnish a good firm support for the hollow part of the butt while being turned off, and in using my invention I attach the chuck to a lathe, as shown in Fig. 1, and I then screw the stump of the butt I into the tapered threaded end of the holder until the conical end *c* of the spindle D rests against the end of the spike N, as shown clearly in Fig. 4. The butt is thus firmly held by the holder, with the spindle D filling the hollow end of the butt to support it, and the hollow end of the butt is prevented from being reduced in size or crushed in while being held and turned. The butt may be then turned to about the end of the holder, and the unfinished end sawed off at the end of the spike, and the butt will then be found to have a uniform size or a uniform taper without the expense and delay of filling each butt.

What I claim as new is—

An improved chuck for turning whip-butts, consisting of the combination of the socket A, the central spindle D, to support the hollow portion of the whip-butt, and the threaded holder B for holding it, substantially as described.

CHARLES S. HARTWELL.

Witnesses:

T. A. CURTIS,

C. E. BUCKLAND.