(No Model.)

# J. R. HIGGS.

## TOOL FOR CUTTING CUE TIPS.

No. 509,599. Patented Nov. 28, 1893.

*Fig. 1.*

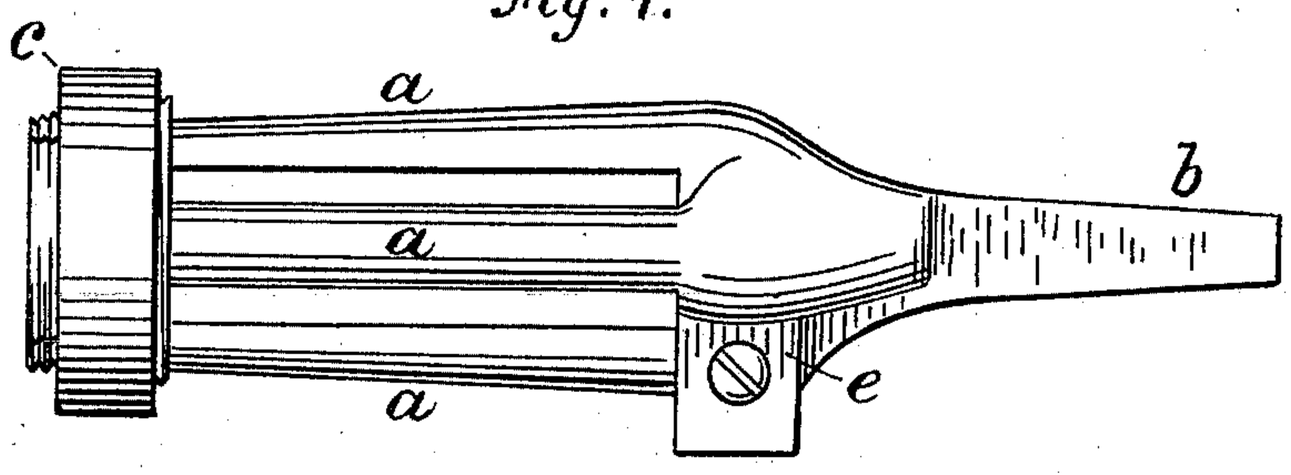



*Fig. 2.*

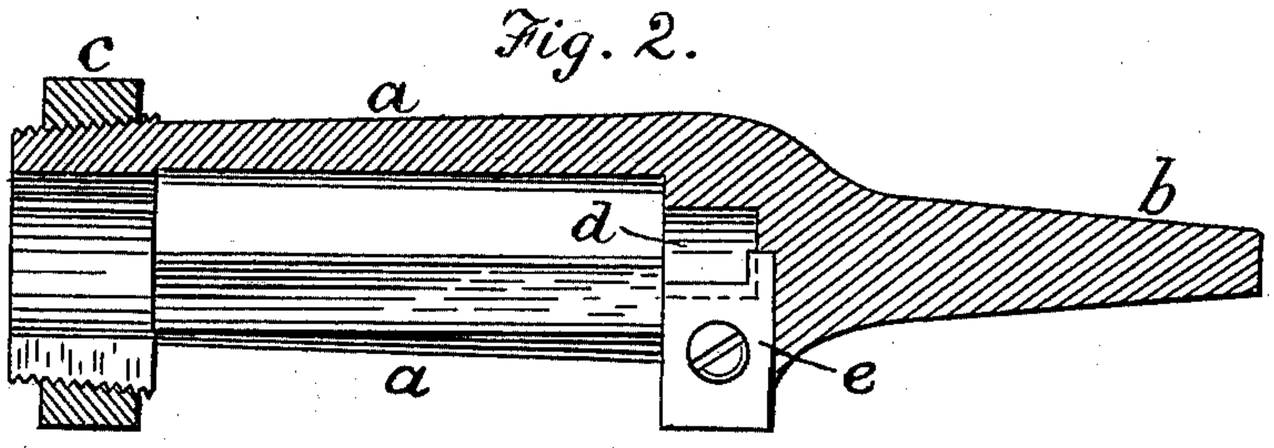



*Fig. 3.*

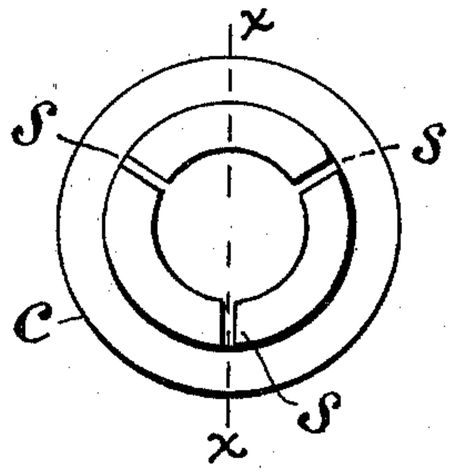
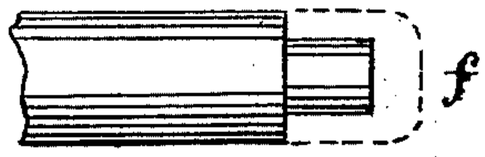



*Fig. 4.*

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# UNITED STATES PATENT OFFICE.

JAMES R. HIGGS, OF NEW HARTFORD, NEW YORK.

## TOOL FOR CUTTING CUE-TIPS.

SPECIFICATION forming part of Letters Patent No. 509,599, dated November 28, 1893.

Application filed September 4, 1889. Serial No. 322,003. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES R. HIGGS, a citizen of the United States, residing at New Hartford, in the county of Oneida and State of New York, have invented certain new and useful Improvements in Tools for Cutting Cue-Tips; and I do hereby declare the following to be a full description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The invention relates to cutting-tools for shaping the ends of cues to receive the tips and consists in certain improvements in the construction of such tools as hereinafter described and claimed.

In the accompanying drawings—Figure 1 represents a side view of a cutting tool provided with my improvements. Fig. 2 is a longitudinal section taken on line *x*—*x* of Fig 3. Fig. 3 is an end view of the tool. Fig. 4 illustrates a cue after being cut.

The tool is chiefly formed of a frame having several arms *a* which are solidly connected at one end of the tool where it is provided with a shank *b* for the purpose of connecting it with a bit-stock. The opposite ends of the arms *a* are enlarged and curved laterally so that their surfaces are on a circle as seen in Fig. 3. Three arms *a* are shown, the spaces between them at their extremities being indicated by *s*, and said arms are provided with an exterior screw thread, at the mouth end of the tool, to receive a nut or threaded ring *c* which may be screwed thereon. The threaded surface of the arms is somewhat tapered, and the threaded surface of the ring *c* is correspondingly tapered, so that by screwing on the ring, the arms, which are somewhat elastic, may be compressed to adjust the tool to fit cues of different sizes.

Within the tool, near the shank *b*, is formed a cylindrical recess *d*, into which the end of the cue passes after being cut and shaped by the cutting knife *e* which is secured by a screw to one side of the tool, in position to cut the cue and reduce the end to the desired size for a tip *f* to be placed thereon as seen in Fig. 4.

The cue to be cut being secured in position, the tool is connected with a bit stock and passed on to the point end of the cue and adjusted to fit the latter by turning the ring *c;* the bit-stock is then turned in the usual manner for boring, and the knife *e* cuts away the cue, the reduced end of the latter passing into the recess *d*.

I claim—

A cutting tool consisting of a frame having several arms which are solidly connected at one end, the opposite ends of said arms being tapered and screw-threaded on their outer surfaces, a ring, the inner surface of which is correspondingly tapered and screw-threaded, a knife secured to said frame, the latter being provided with a recess *d*, substantially as and for the purposes described.

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