

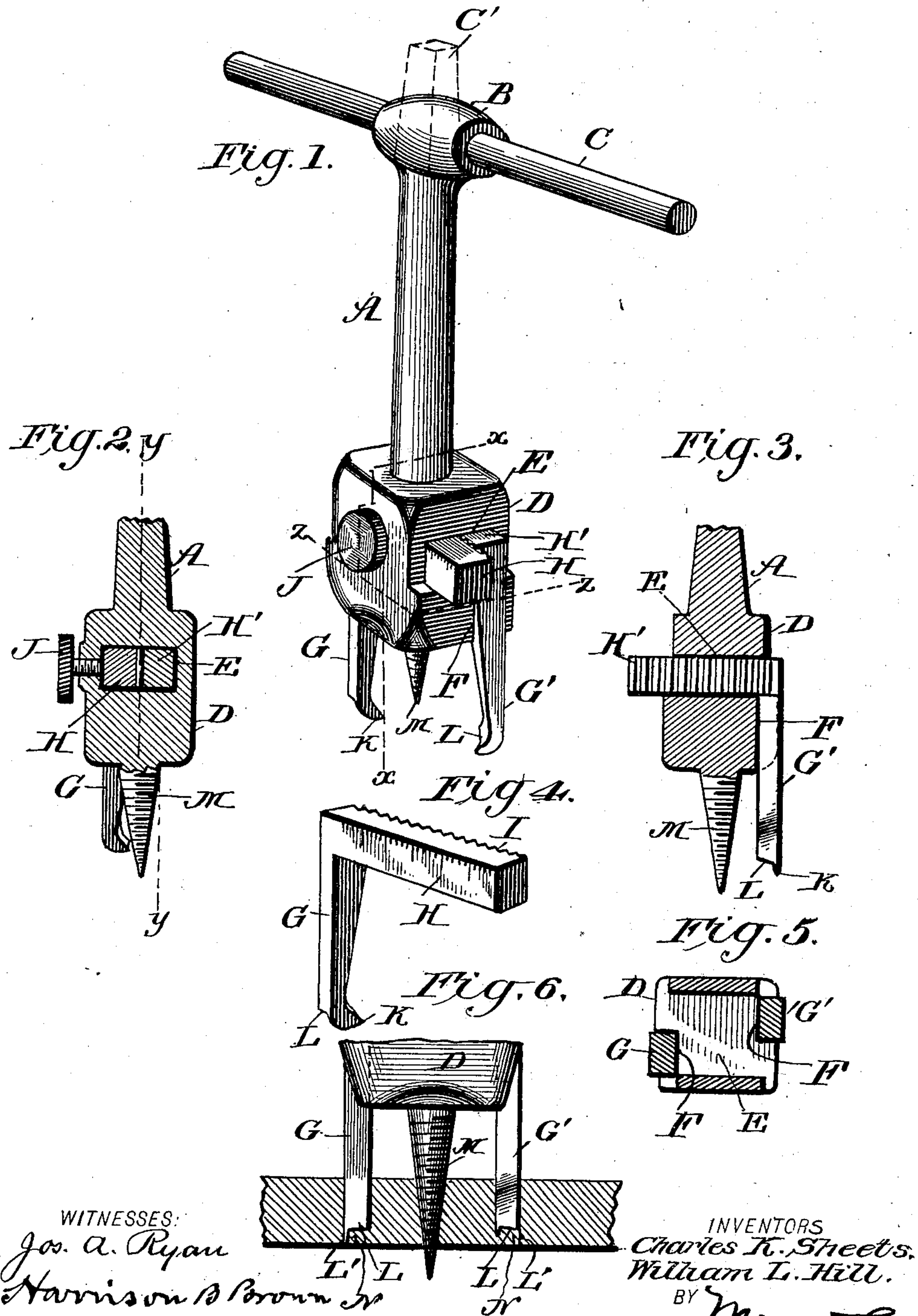
No. 730,709.

PATENTED JUNE 9, 1903.

C. K. SHEETS & W. L. HILL.
BORING TOOL.

APPLICATION FILED FEB. 26, 1903.

NO MODEL.



WITNESSES:
Jos. A. Ryan
Harrison B. Brown

INVENTORS
Charles K. Sheets,
William L. Hill.
BY Munn & Co.
ATTORNEYS.

UNITED STATES PATENT OFFICE.

CHARLES K. SHEETS AND WILLIAM L. HILL, OF MONTGOMERY CITY,
MISSOURI.

BORING-TOOL.

SPECIFICATION forming part of Letters Patent No. 730,709, dated June 9, 1903.

Application filed February 26, 1903. Serial No. 145,271. (No model.)

To all whom it may concern:

Be it known that we, CHARLES K. SHEETS and WILLIAM L. HILL, citizens of the United States, and residents of Montgomery City, in the county of Montgomery and State of Missouri, have made certain new and useful Improvements in Boring-Tools, of which the following is a specification.

This invention relates to boring-tools, more definitely stated tools specially adapted for boring bung-holes.

The invention consists of a new and improved tool of that character which will be hereinafter fully described, and the novel features pointed out in the claims.

In order to enable others to make and use our invention, we will now proceed to describe it in detail with reference to the accompanying drawings, forming a part of this specification.

Figure 1 is a perspective view illustrating our invention. Fig. 2 is a detail sectional view on line X X, Fig. 1. Fig. 3 is a similar view on line y y, Fig. 2. Fig. 4 is a detail perspective view of one of the cutter-blades. Fig. 5 is a horizontal section on line z z, Fig. 1. Fig. 6 is a detail view illustrating our invention in use.

In carrying out our invention we employ a bit-shank A, which may be formed with a head B, having a transverse hole therethrough adapted to receive a handle C, as shown by our drawings. The head B on the upper end of the shank may be formed angular, as indicated by dotted lines C', adapting the tool to be used with a brace, as will be understood. The lower end of the shank A is formed with an enlargement D, having therethrough a substantially squared transverse opening E, and we provide the enlargement D on opposite sides with sockets F F, which extend from the lower end of the said enlargement D up to the transverse opening E, as shown.

G G' indicate blades having horizontally-disposed shanks or arms H H', which when arranged together side to side, as shown, conform to the shape of the opening E. The contiguous sides of the shanks are provided with interlocking teeth I, which in connection with a clamping-screw J provide positive

locking means for the blades, as they may be adjusted for boring the desired size bung-hole. The outer faces of the shanks or arms H H' may be graduated to facilitate proper adjustment of the blades G G'. It will be noticed, that the shanks H H' are arranged in the opening E from opposite sides of the enlargement D—i. e., they lap, with their free ends projecting in opposite directions. In this position of the shanks H H' each blade G G' is adapted to enter its respective socket F in the enlargement D and is braced thereby, as will be understood. It will be further noticed that the lower ends of both blades G G' have a cutting-lip K, the lip on the blade G being a little the longer, and that their forward lower ends are formed with shaving edges L.

We would call particular attention to our special arrangement of the lips K at the lower ends of the blades G G'. It will be noticed that the cutting-lip on the blade G is located at one or the inner side of the blade and that the similar lip on the blade G' is located at the outer side thereof. The object of this arrangement of the lips will be understood as adapting them to form two circular concentric cuts L', one a little larger than the other.

M indicates a bit-point or wood-screw extended downwardly from the enlargement D, as shown. The object of the screw M is to provide feeding means adapted to draw down and force the lips K into cutting action, and with the shaving edges L, adapted to plow up the wood between the two circular cuts L'.

Our improved tool has an advantage over all similar tools known to us in that a bung-hole may be bored without liability of shavings getting into the barrel. We have hereinbefore stated that the cutting-lip on one blade is a little longer than the cutting-lip on the other blade. Now obviously when the tool is in use the lip on the blade G will be the first to cut through the barrel, forming a loose plug, which obviously will turn as the tool is rotated, and thereby arrest further boring or plowing action of the shaving edges L. It will be noticed that an outer annular ledge or shoulder N is left on the plug. The shoulder thus left will effectively prevent shavings dropping into the barrel when the plug is lifted.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The hereinbefore-described bung-hole-boring tool consisting of a shank having at its lower end, a feeding-screw and adjustable blades, the latter having at their lower ends shaving edges and cutting-lips, the said lips being arranged to make concentric cuts, and one lip formed the longer and adapted to travel in the outer circle, substantially as described.

2. A bung-hole-borer tool consisting of a shank having an opening transversely through its lower end, blades with horizontally-disposed shanks, which when arranged together conform to the said opening through the lower end of the shank, meshing teeth on

the contiguous sides of the said horizontally-disposed shanks, a clamping-screw serving to hold the said teeth, on the horizontally-disposed shanks, in locking engagement, vertically-disposed sockets located on opposite sides and at the lower end of the shank, with the said sockets adapted to receive the said blades as specified, shaving edges and cutting-lips, one lip being the longer and adapted to travel in the outer circle of concentric cuts formed by the said lips, and a feeding bit or screw extending down from the lower end of the shank, substantially as described.

CHARLES K. SHEETS.

WILLIAM L. HILL.

Witnesses:

FRANK B. CLARE,
J. WILL DAVIS.