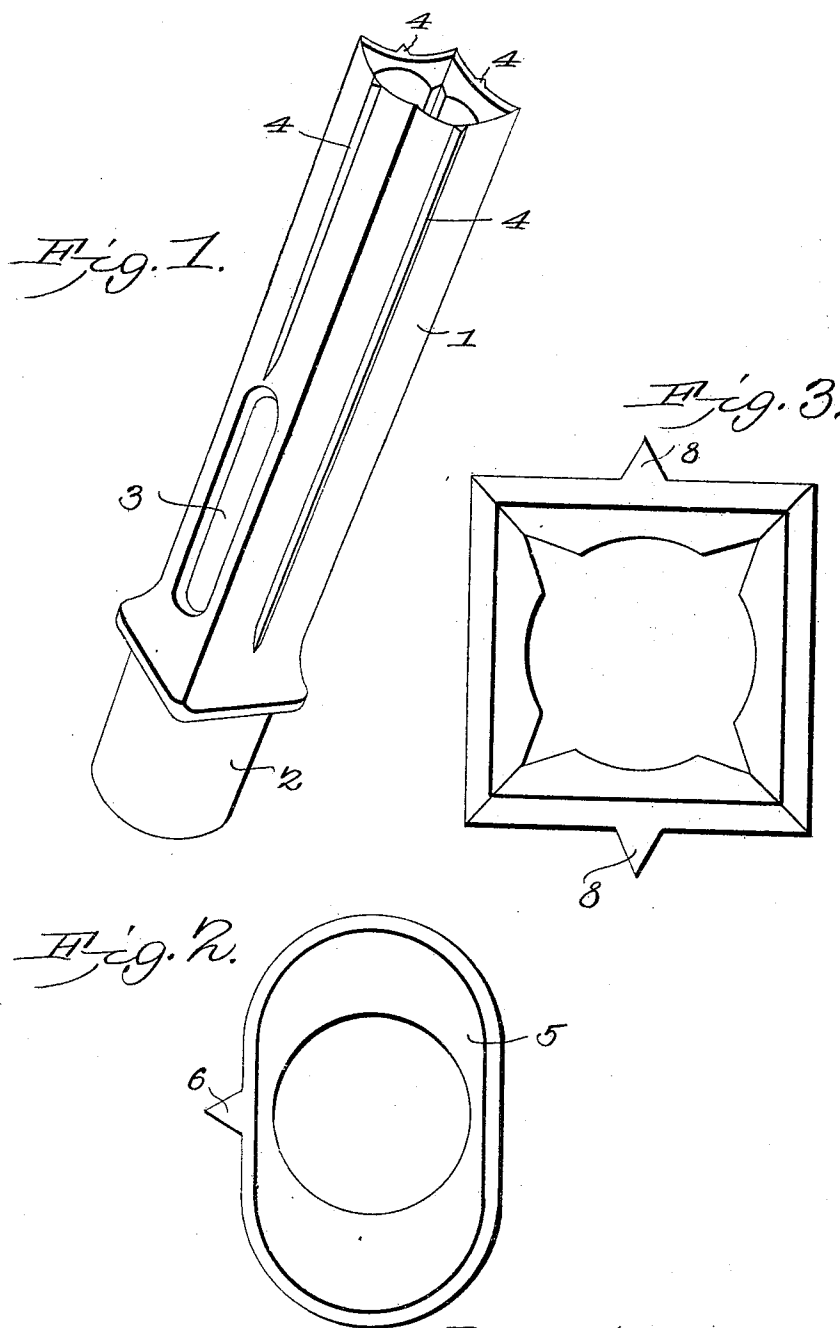


No. 824,673.

PATENTED JUNE 26, 1906.

B. C. ROCKWELL,
HOLLOW MORTISING CHISEL.
APPLICATION FILED SEPT. 21, 1905.



Witnesses:

E. H. Stewart
R. M. Elliott

Byrd C. Rockwell,
Inventor,

by *C. A. Snow & Co.*
Attorneys.

UNITED STATES PATENT OFFICE.

BYRD C. ROCKWELL, OF GIFFORD, ARKANSAS.

HOLLOW MORTISING-CHISEL.

No. 824,673.

Specification of Letters Patent.

Patented June 26, 1906.

Application filed September 21, 1905. Serial No. 279,532.

To all whom it may concern:

Be it known that I, BYRD C. ROCKWELL, a citizen of the United States, residing at Gifford, in the county of Hot Spring and State of Arkansas, have invented a new and useful Hollow Mortising-Chisel, of which the following is a specification.

This invention relates to hollow mortising-chisels.

The object of the invention is in a novel and practical manner to cause the chisel, in addition to forming a mortise, to form air-escape and glue-receiving channels, whereby the scoring, grooving, or threading of dowel pins to permit the escape of air from the mortise and the even spreading of the glue is obviated.

A further object is to reinforce the chisel at its weakest part, whereby its life will be measurably increased and its utility thus enhanced.

With the above and other objects in view, as will appear as the nature of the invention is better understood, the same consists in the novel construction and combination of parts of a hollow chisel, as will be hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which like characters of reference indicate corresponding parts, Figure 1 is a view in perspective of a hollow mortising-chisel constructed in accordance with the present invention. Figs. 2 and 3 are end views of slightly-modified forms of chisel.

In the form of the invention shown in Fig. 1 the chisel 1 is quadrangular in cross-section and is provided with the usual head 2 for connection with a percussive machine and with a slot 3, through which the chips formed by the auger or bit (not shown) escape. Each face of the chisel is provided with a fin or rib 4, which is shown as triangular in cross-section, although it may be of any other desired contour, and extends throughout the length of the bit portion of the chisel. These fins operate to cut grooves in the walls of the mortise as the chisel descends, thereby providing a means by which air can escape when a tenon is driven into the mortise, thereby to

allow the glue or other adhesive evenly to spread, and thus secure a firm and rigid joint. The grooves formed by the ribs also operate to catch and retain any surplus glue, and thereby still further accentuate the connection between the mortise and the tenon.

In some instances it may not be necessary to employ four of the fins, as under some conditions it will only be desirable to form a single groove in the mortise and under other conditions only two. As shown in Fig. 2, the chisel 5, which is approximately elliptical in cross-section, is provided with but a single fin 6, while the chisel 7 (shown in Fig. 3) is provided with two of the fins 8. Instead of having the fins oppositely disposed, as shown in this figure, they may be arranged on contiguous sides of the chisel, and as this arrangement will be readily understood detailed illustration thereof is deemed unnecessary.

As is well known, chisels of this character are made in various shapes—such as quadrangular, rectangular, diamond shape, rhomboidal, and the like—and it is to be understood that the present invention is adapted to any form of hollow chisel that may be constructed.

Having thus described the invention, what is claimed is—

1. A hollow mortising-chisel provided exteriorly with an air-channel-forming rib or fin.

2. A hollow mortising-chisel having one of its faces provided with an air-forming rib or fin that is approximately triangular in cross-section.

3. A hollow mortising-chisel provided exteriorly with a plurality of air-channel-forming ribs or fins.

4. A hollow mortising-chisel provided exteriorly with a combined air-channel forming and strengthening rib or fin.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

BYRD C. ROCKWELL.

Witnesses:

J. E. YOUNG,
WILLIAM R. DUFFIE.