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H. & R. HUGHES.  
DEVICE FOR DRESSING STONE.

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Fig 2

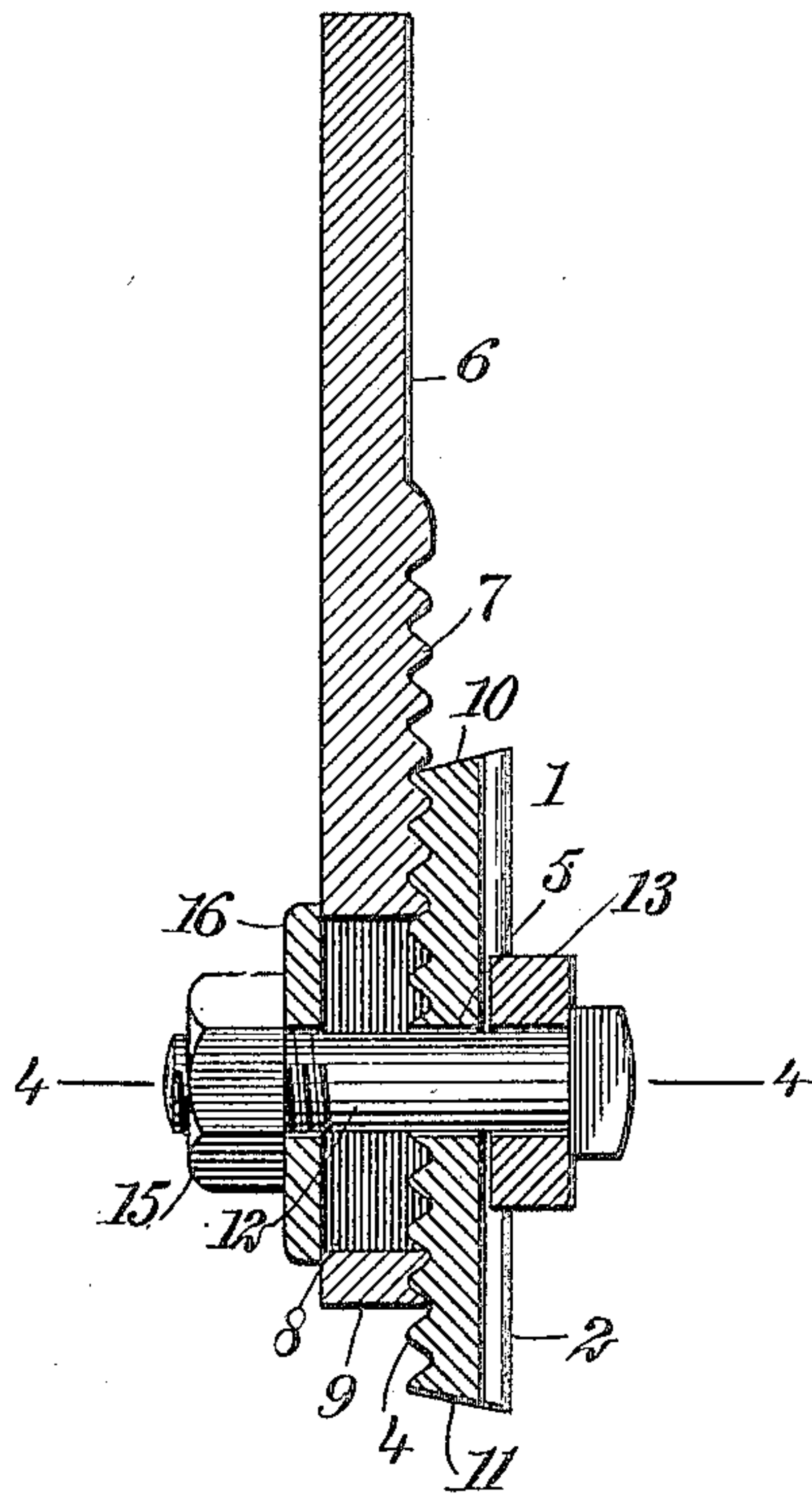
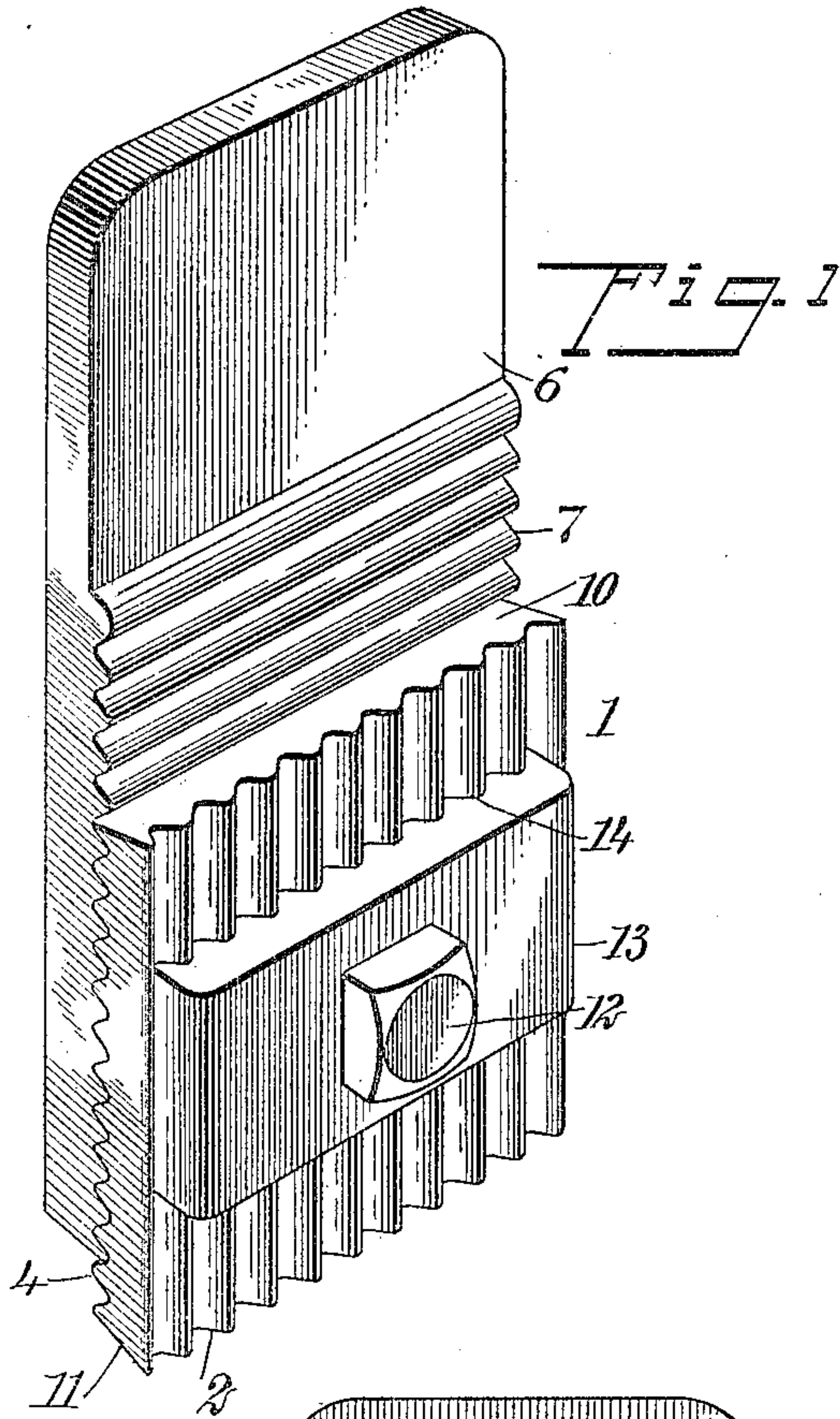


Fig. 3

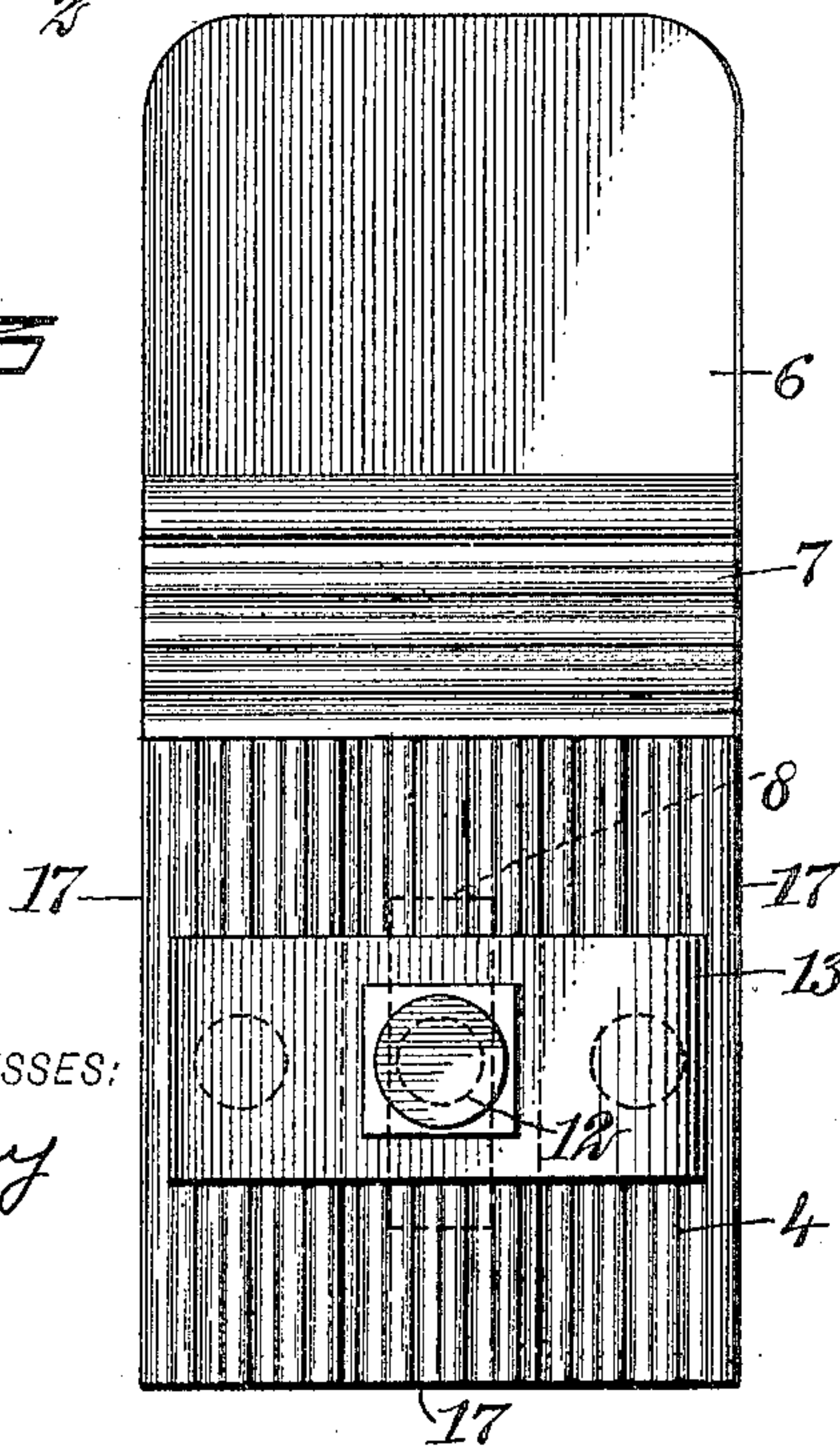
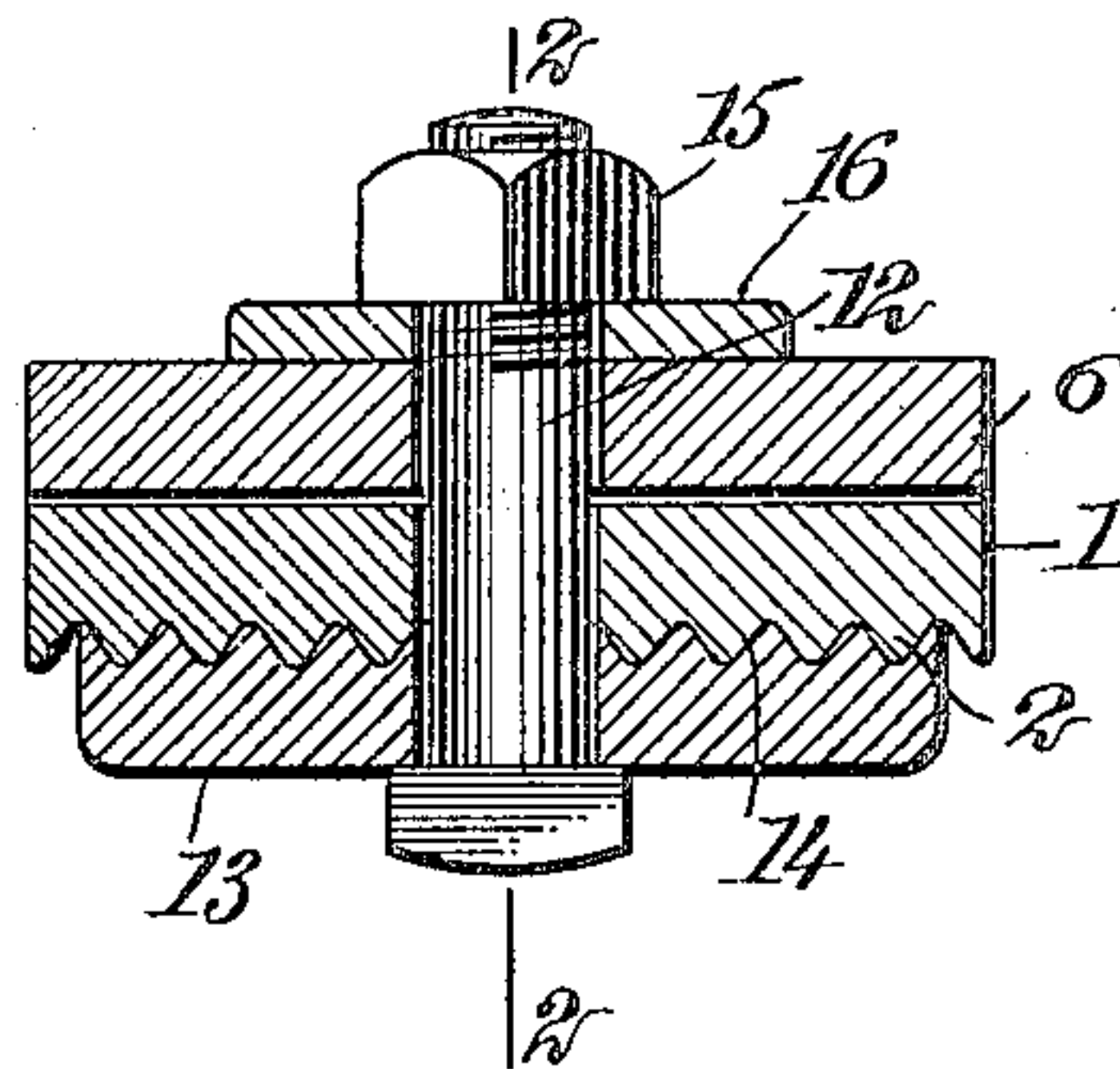


Fig. 4



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# UNITED STATES PATENT OFFICE.

HENRY HUGHES AND ROBERT HUGHES, OF MOUNT VERNON, NEW YORK.

## DEVICE FOR DRESSING STONE.

No. 813,210.

Specification of Letters Patent.

Patented Feb. 20, 1906.

Application filed October 28, 1905. Serial No. 284,779.

*To all whom it may concern:*

Be it known that we, HENRY HUGHES and ROBERT HUGHES, citizens of the United States, and residents of Mount Vernon, in the county of Westchester and State of New York, have invented new and useful Improvements in a Device for Dressing Stone, of which the following is a full, clear, and exact description.

10 This invention relates to devices for dressing stone; and it consists, substantially, in the details of construction and combinations of parts hereinafter more particularly described, and pointed out in the claims.

15 In dressing the surfaces of stones for building and other purposes to form channels or grooves therein it has been usual in many instances hitherto to employ a dressing-tool of rectangular form provided at opposite edges 20 of one of its faces with corrugations or ribs, said edges being beveled to form teeth or cutting portions of the tool, the latter being provided with four bolt-holes and secured to a holder therefor in the dressing-machine by 25 means of bolts inserted in said holes and suitable clamping devices. With a dressing-tool of this character it is possible to use but a limited proportion thereof, due to the number and requisite location of the bolt-holes 30 therein, the tool becoming useless after repeated sharpening or wearing away of the cutting portions thereof to the edges of said bolt-holes, although a greater proportion of the same remains unused and which becomes 35 a loss.

One of the principal objects of the present invention is to overcome the above-mentioned disadvantage or objection and to provide a stone-dressing device of an embodiment enabling the device to be entirely utilized 40 without loss, as will presently be explained.

A further object is to provide a stone-dressing device which is simple in construction and comparatively inexpensive to manufacture, besides being thoroughly effective and 45 reliable in operation and readily attached to or removed from the holder therefor.

The above and additional objects are attained by means substantially such as are 50 illustrated in the accompanying drawings, in which—

Figure 1 is a view in perspective of our im-

proved stone-dressing device as applied for use upon the holder therefor. Fig. 2 is a vertical sectional view on the line 2 2 of Fig. 4. 55 Fig. 3 is a front view, and Fig. 4 is a horizontal sectional view on the line 4 4 of Fig. 2.

Before proceeding with a more detailed description it may be stated that in the form of our improvements herein shown we employ 60 a stone-dressing device or tool of special construction, together with a specially-constructed holder therefor and special means for clamping the device upon the holder for use in the ordinary way. 65

While we have herein represented our improvements in a certain preferred embodiment, it will be understood that we do not limit ourselves thereto in precise detail, since immaterial changes therein may be resorted 70 to coming within the scope of our invention.

Reference being had to the drawings by the designating characters thereon, 1 represents our improved stone-dressing device or tool, which, as shown, is rectangular in form 75 and provided on one face thereof with a series of corrugations or ribs 2, extending across said face in one direction, while on its other face is provided a series of corresponding corrugations or ribs 4, extending across this 80 face in a direction at right angles to the corrugations or ribs 2. The said device or holder 1 is provided with a central bolt-hole 5, and the holder for the device when the device is employed in the stone-dressing machine (not shown) in a manner well understood is indicated at 6, the same being provided across the greater proportion of one of its faces with a series of corrugations or ribs 7, corresponding with the corrugations or 90 ribs 2 and 4 on the opposite faces of the said device or tool. The said holder 6 is formed centrally between the vertical edges thereof with a rectangular slot 8, the lower end of which terminates a suitable distance from 95 the lower horizontal edge 9 of the holder, (see Fig. 2,) and the device or tool 1 is applied to the holder for use by causing the series of corrugations or ribs on either face thereof to engage with the corrugations or ribs 7 of the 100 holder, with a suitable proportion of the device or tool projecting beyond the lower edge of the holder for effective cutting of the stone, (not shown,) it being mentioned that



each set of opposite edges of the device or tool is reversely beveled—as at 10 and 11, for instance—by which to form the teeth or cutting portions thereof. The bolt-hole 5 in the device or tool 1 is made to register with the said rectangular slot 8 in the tool-holder 6, and a headed bolt 12 is inserted through said bolt-hole and slot after first fitting to the device or tool 1 a clamp 13, having the inner face thereof formed with a series of corrugations or ribs 14, adapted to fit or engage with the corrugations or ribs on the face of the tool or device 1 outermost at the time, a nut 15 being screwed tightly on the threaded portion of the said bolt 12 against a washer 16 to thus securely fasten or secure the device or tool 1 in place upon the holder for use.

From the foregoing description it will be seen that as one of the cutting edges or portions of the device or tool 1 becomes worn down from use and repeated sharpening the said device or tool may be reversed and similarly employed until the opposite edge or cutting portions thereof become worn down in a similar way, and by this time the device or tool 1 will have become reduced to the size of one of the sections 17. (Shown in Fig. 3.) After so utilizing the device or tool another one may be taken and utilized in a similar way and still a third one also thus utilized, and then by placing together the three sections 17 thus produced and turning them over and applying the opposite series of corrugations or ribs thereof to the corrugations or ribs 7 of the holder 6 the three said sections may be employed together as a single device or tool 1 precisely in the same manner as in the original employment of the tool or device, the clamp 15 serving to retain all the sections in place, for the reason that the bolt 12 is inserted through the bolt-hole of the central one of the sections, the lateral portions of the clamp serving to retain the outside sections 16 in place without the necessity of any bolt therefor, as will be apparent. It will thus be seen that a stone-dressing device or tool constructed in accordance with our invention is capable of being utilized to the full, thereby effecting a great saving of metal, besides enabling the dressing of stone to be performed more expeditiously and economically than hitherto.

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

1. A stone-dressing tool, having corrugations extending across the two faces thereof, the corrugations upon one face being arranged at an angle to the corrugations on the opposite face.

2. A stone-dressing tool, having corrugations extending across the two faces thereof, the corrugations upon one face being ar-

ranged at a right angle to the corrugations on the opposite face.

3. A stone-dressing tool, having corrugations extending across the two faces thereof, the corrugations upon one face being arranged at an angle to the corrugations on the opposite face, and the tool being provided with a central hole.

4. A stone-dressing tool having parallel faces provided with corrugations, the corrugations upon one face being arranged at an angle to the corrugations on the opposite face, and the tool being provided with a central hole perpendicular to the parallel faces.

5. A stone-dressing tool having parallel faces provided with corrugations, the corrugations upon one face being arranged at an angle to the corrugations on the opposite face, and the two being provided with a central hole perpendicular with the parallel faces.

6. A stone-dressing tool having corrugations extending across the two faces thereof, the corrugations upon one face being arranged at an angle to the corrugations on the opposite face, and a holder having corrugations across one of its faces adapted to be engaged by either series of those on the tool.

7. A stone-dressing tool, having corrugations extending across the two faces thereof in directions at right angles to each other, combined with a holder for the tool, having corrugations across one of its faces, adapted to be engaged by either series of those on the tool.

8. A stone-dressing tool, having corrugations extending across the two faces thereof, the corrugations upon one face being arranged at an angle to the corrugations on the opposite face, a holder for the tool having corrugations across one of its faces adapted to be engaged by either series of those on the tool, and a clamping member for securing the tool in place, the corrugations on one of its faces adapted for engagement with either of those on the tool.

9. A stone-dressing tool, having corrugations extending across the two faces thereof in directions at right angles to each other, combined with a holder for the tool, having corrugations across one of its faces, adapted to be engaged by either series of those on the tool, and a clamp member for securing the tool in place, having corrugations on one of its faces, adapted for engagement with either series of those on the tool.

10. A rectangular stone-dressing tool having corrugations extending across the two faces thereof in directions at right angles to each other, and provided with a central hole combined with a holder for the tool, having a vertical slot therein, a bolt extending through said hole and slot, a clamp carried by the

bolt, and means for securing the parts together, said holder having corrugations engaged by one series of corrugations on the tool and said clamp having corrugations on the face thereof, engaging with the other series of corrugations on the tool.

In testimony whereof we have signed our

names to this specification in the presence of two subscribing witnesses.

HENRY HUGHES.  
ROBERT HUGHES.

Witnesses:

WM. R. T. JEUNE,  
HARRY J. CUTHBERT.