

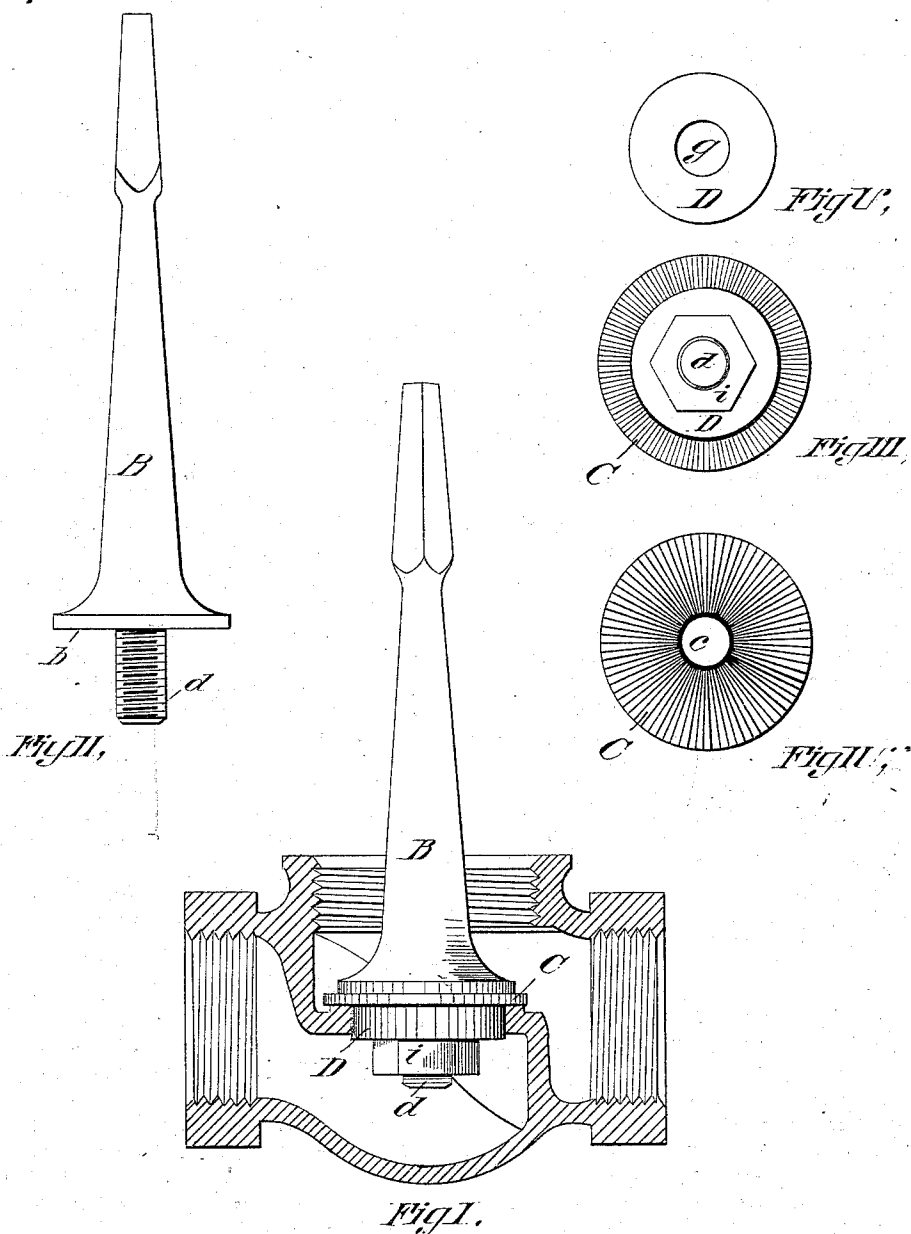
(No Model.)

P. J. WRIGHT & S. RUST.

DEVICE FOR DRESSING VALVE SEATS OF GLOBE VALVES.

No. 278,478.

Patented May 29, 1883.



Witnessed:
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UNITED STATES PATENT OFFICE.

PLINY J. WRIGHT AND SAMUEL RUST, OF SOUTH HADLEY FALLS, MASS.

DEVICE FOR DRESSING VALVE-SEATS OF GLOBE-VALVES.

SPECIFICATION forming part of Letters Patent No. 278,478, dated May 29, 1883.

Application filed February 24, 1883. (No model.)

To all whom it may concern:

Be it known that we, PLINY J. WRIGHT and SAMUEL RUST, citizens of the United States, residing at South Hadley Falls, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Dressing-Tools for Valve-Seats of Globe-Valves, of which the following is a specification.

Our invention relates to a new tool having for its object the dressing or restoration of the valve-seats of "globe-valves" without removing them from their positions; and its nature is fully illustrated in the accompanying drawings, in which—

Figure I is an elevation of our tool in position in a globe-valve, shown in transverse section. Fig. II is an elevation of a part of the tool. Fig. III is an end view of the tool, and Figs. IV and V are views of parts of the same.

When from the corrosive action of steam the valve-seat of a brass globe-valve has become partially eaten away, and so practically destroyed, it has been necessary heretofore to remove the entire globe-valve either to replace it with a perfect one or repair it; but by this device the seat may be quickly dressed upon only removing the valve to expose its seat.

B is a stem adapted at its upper end to be received in a bit-stock or other convenient handle for rotating it, and formed at its lower end into a flat shoulder, *b*, surrounding a screw-stem, *d*, prolonged axially from the stem B. Received over the stem *d* through the corresponding hole, *c*, therein is the cutter C. The cutter C, of a flat disk shape, has one or both sides file-cut, and when received over stem *d* is squarely seated upon the shoulder *b*, with the plane of its sides at right angles to the axis of stem B. Received over stem *d* through its central hole, *g*, and to have one side come flatly against the cutter C, is the circular guide D; and against the under side of guide D, upon screw-stem *d*, comes the nut *i*, which, when

tightened, securely binds the guide D and cutter C against shoulder *b*, to cause all of the parts to be rigid with the stem. The thickness of guide D equals that of the walls of the valve-seat, and its perimeter filling the port holds the projecting cutting-surface of the cutter C in the position to form a perfect valve-seat and at the proper angle to the axis of the port.

It will be seen that upon the same stem B cutters and guides may be combined to meet the requirements of different-sized globe-valves.

The cutters we prefer to form, as seen in Figs. III and IV, to have on opposite sides cutting-surfaces of varying coarseness, so that the finer, when brought into position, may act as a finishing-tool to the formed seat, and so that the rough opposite sides effectually prevent the cutter and guide from rotating upon the shoulder *d*.

By this tool many valves which would be discarded or used in a leaky condition may quickly be made as good as new.

Now, having described our invention, what we claim is—

1. The within-described tool for dressing the seats of globe-valves, consisting of a stem, B, adapted to have one end received in a bit-stock or other rotating handle, and having its other provided with a shoulder, *b*, and screw-stem *d*, a perforated disk cutter, C, a perforated guide, D, and a nut, *i*, all combined and arranged to operate in the manner and for the purpose set forth.

2. The combination, with the stem B, screw *d*, guide D, and nut *i*, of the perforated disk cutter C, provided with a file-surface upon both sides, of differing coarseness, for the purpose as described.

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Witnesses:

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