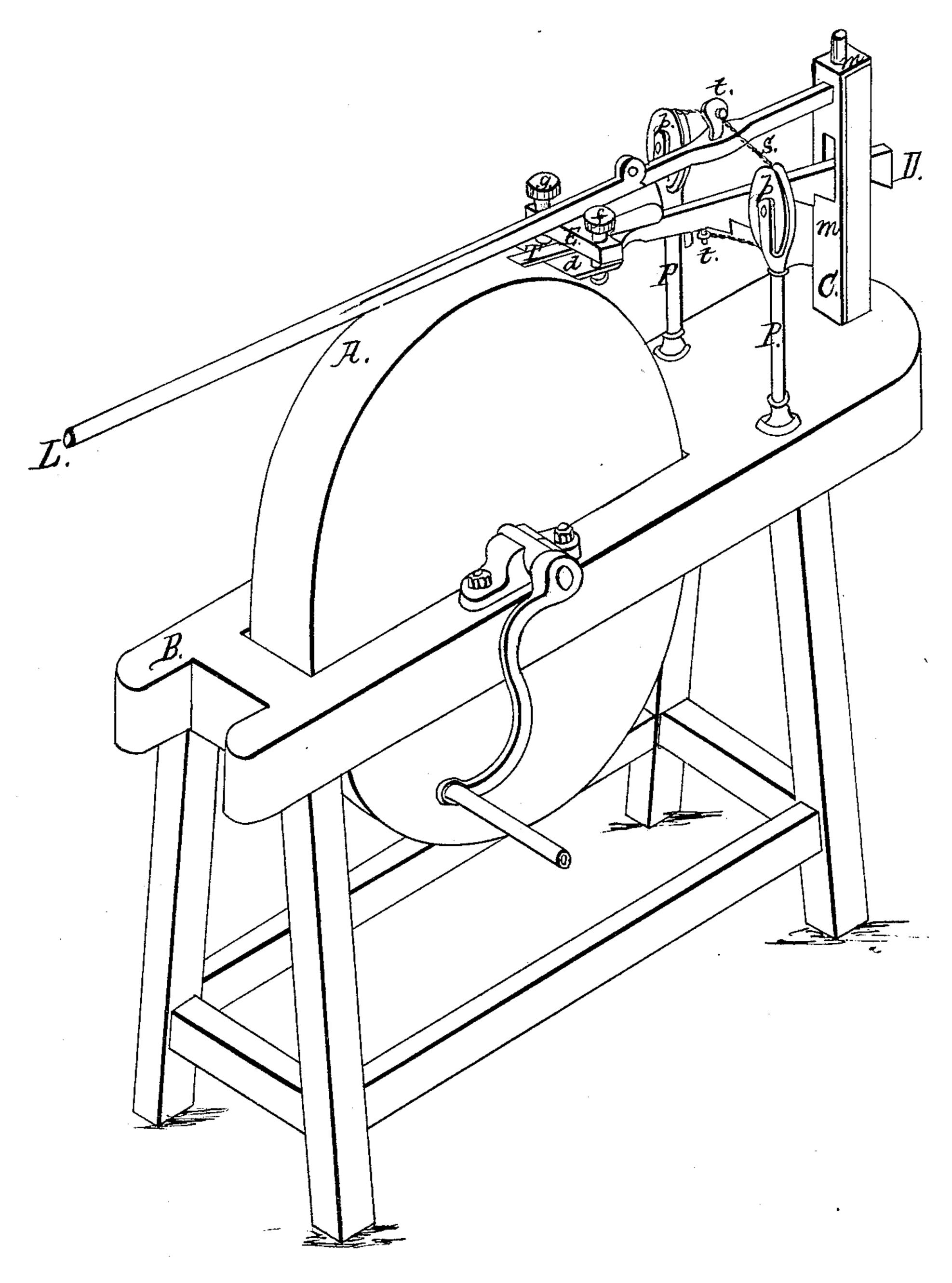
S.Belle.

Shamening Mach.

J 80,352

Patented Feb. 2, 1869.



Witnesses.

C. B. Harrey ( Olcar J. Harrey). Inventor.

Stuvart Bennett.



## STEWART BENNETT, OF WILKESBARRE, PENNSYLVANIA.

Letters Patent No. 86,352, dated February 2, 1869.

## IMPROVEMENT IN DEVICE FOR GRINDING TOOLS.

The Schedule referred to in these Letters Patent and making part of the same.

To all to whom it may come:

Be it known that I, Stewart Bennett, of the borough of Wilkesbarre, county of Luzerne, and State of Pennsylvania, have invented a new and improved Device of Holding Tools to the Grindstone, to be Sharpened, &c.; (the invention is called "Bennett's Improvement in Devices for Grinding Tools;") and I do declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification. (See drawings, Figures I, II, III, IV, V.)

In Fig. I, A represents a grindstone, hung on its

bench B.

O represents a wooden post, of suitable length, placed on the grindstone-bench, and made to turn round easily, or be stationary, and prevented from pulling out by a pin through it, under the bench.

m represents an iron plate, covering the face and top

of said post, with two mortises through it.

D d represent a wood or iron bar, (of any width, thickness, or length, notched with eighteen or more notches, and two small projections from one end, on one side, and the other end made flat, with a square or round hole through it,) extending from C to grindstone A.

E represents a follower, of wood or iron, placed across the flat end of said bar D, and operated on said flat end by the two screws g and f, to hold the tool steady.

Small letter o represents a hole through the flat end of said bar D.

g and f represent thumb-screws.

t and t represent projections on the lower side of bar D and on the upper side of L.

T represents the tool, placed on the flat end of bar D and d, and under the follower E, for grinding.

L represents a lever, of wood or iron, with or without a joint in it, fastened at one end to the post C, and extending over the tool T and grindstone, to be used to bear the tool to the stone, and to move it over the face of the stone.

Pand P represent two posts, fastened to the bench of the grindstone, with a pulley, p, on the top of each.

s represents a cord, fastened to the projections on the upper side of bar L and under sides of the bar D, thence around the pulleys p and p, to move and steady the bar holding the tool.

J represents wood or iron jaws, with a joint at m', to open and close, to insert under E, on the flat end of d,

to hold tools of great length.

F represents a bar or plate, of wood or iron, placed on the ends of J, and fastened to it by the thumb-screws f' and g'.

n represents holes in p.

To enable others skilled in the art to make and use

my invention, I will proceed to describe its construction and operation.

The grindstone is placed or hung on a substantial

bench, of proper length and width.

The post C is made of wood, plated and capped with iron, with an oblong or mortise-hole through it. The post C is placed on one end of the bench B, fixed to turn readily, or be stationary, and held by a pin on the under side of the bench B.

The bar D is made of wood or iron, of any length or width, with eighteen or more notches or teeth at one end and on the under side, to catch and hold to the plate of iron on the post C, when placed through the mortise-hole. The notches are used to adjust the tool to the grindstone, and to give it such a bevel as is required. The other end of the bar D is made flat at d, like a shovel, and is placed near the grindstone. It has a hole, o, to permit the eye of an adze, or such like tool, to be placed in, so as to have it adjusted level.

The tool T to be ground is placed on the flat end d, and the follower E, of wood or iron, is then screwed down on top of the tool by the thumb-screws f and g, to hold it firmly to its place. The lever L is then fast-ened into the top end of the post C, and extends along over the grindstone, and over the follower E, used to press the tool to the stone, and to move it along on the stone when in motion.

The string s is fastened to the projections t and t, and passed around both pulleys, and fastened to a projection or thumb-screw, on top of the lever L, used to move and steady the tool on the grindstone. The lever L has a joint in it, a little back of the tool being ground, to facilitate the removing or inserting of a tool to be examined or ground.

The part J is a portion of the machine, made of wood or iron, with a joint at m', so as to open and close, and used to grind drawing-knives, scythes, and any long tool. It is inserted on the flat end of D, and under the follower E, and fastened by the thumb-screws f and g.

1. I claim the bar D, constructed as described, in combination with post C, as and for the purpose set forth.

2. In combination with bar D, I claim the clamp E and set-screws f and g, substantially as described.

3. In combination with bar D and clamp E, I claim the hinged jaws J with clamp F, substantially as set forth.

4. In combination with bar D, I claim the operating-device, consisting of post P, pulleys p, rope s, pins t, and lever L, operating substantially as described, and for the purpose specified.

Witnesses: STEWART BENNETT.

OSCAR J. HARVEY, E. B. HARVEY.