## (No Model.) N. PFLAUM. METALLIC PISTON PACKING. Patented Dec. 15, 1885. No. 332,433.

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Fig:1.



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# UNITED STATES PATENT OFFICE.

#### NICHOLAS PFLAUM, OF PORT JERVIS, NEW YORK.

### METALLIC PISTON-PACKING.

SPECIFICATION forming part of Letters Patent No. 332,433, dated December 15, 1885.

Application filed May 16, 1885. Serial No. 165,757. (No model.)

To all whom it may concern:

Be it known that I, NICHOLAS PFLAUM, of Port Jervis, in the county of Orange and State of New York, have invented a new and useful 5 Improvement in Metallic Piston-Packings, of which the following is a full, clear, and exact

description.

Reference is to be had to the accompanying drawings, forming a part of this specification, to in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view, partly in section, of one of my improved piston packings. Fig. 2 is a side elevation of the same, part being broken away and showing a part of the calin

- <sup>15</sup> broken away, and showing a part of the cylinder in section. Fig. 3 is a perspective view of one of the exterior segments. Fig. 4 is a perspective view of one of the interior angular blocks.
- 20 The object of this invention is to improve the construction of the metallic piston-pack-

the packing is to be placed. The packing is held out against the inner surface of the 50 cylinder by open ring-springs F, placed within the said packing, as shown in Figs. 1 and 2. With this construction the outer surface of the packing, as it wears, will always retain its circular form, and will thus always retain in close contact with the inner surface of the cylinder.

Through the centers of the segments D are formed radial perforations G, which are extended through the adjacent ends of the angu- 60 lar segments A, as shown in Figs. 1 and 2. The packing, when in use, is secured between the piston-head and the follower in the ordinary manner, and which close up the opposite sides of the packing and form a cham- 65 ber.

The piston-head and follower are not shown in the drawings, as there is nothing new in their construction.

The interior of the piston packing A D is de- 70 signed to be filled with tallow, which is slowly melted by the heat, and gradually escapes through the perforations G, so that the inner surface of the cylinder will be kept lubricated. Having thus fully described my invention, I 75 claim as new and desire to secure by Letters Patent-A piston-packing constructed substantially as herein shown and described, and consisting of the interior angular blocks, A, having their 80 apices convexed in the arc of a circle, and provided with central grooves in their outer surfaces and recesses in their adjacent ends, and the exterior segments, D, covering the joints between the angular blocks, and provid-85 ed with tongues on their inner surfaces and with central radial perforations registering with the end recesses of the angular blocks, whereby tallow can pass from the interior space of the piston-packing to the surface of 90 the cylinder, to keep it lubricated, as set forth.

ing for which Letters Patent No. 237,477 were
issued February 8, 1881, in such a manner as
to make them more convenient in construction
25 and more reliable in use.

The invention consists in the construction and combination of various parts of the packing, as will be hereinafter fully described and then claimed.

In the drawings, A represents the interior blocks, the exterior faces of which are angular, and have their apices rounded off upon the arc of the circle of the interior surface of the cylinder B, in which the packing is to be
 placed.

In the central parts of the outer faces of the angular blocks A are formed grooves C, as shown in full lines in Figs. 2 and 4, and in dotted lines in Fig. 1. The interior faces of 40 the angular blocks A are concaved upon the arc of a circle, as shown in Figs. 1 and 4.

D are plane convex segments, upon the central parts of the plane inner surfaces of which are formed tongues E, of such a shape and 45 size as to fit into the grooves C of the angular blocks B. The outer faces of the segments D are convexed upon the arc of the circle of the interior surface of the cylinder B, in which

#### NICHOLAS PFLAUM.

Witnesses: WM. H. CRANE, JOSEPH A. NOLL.

