

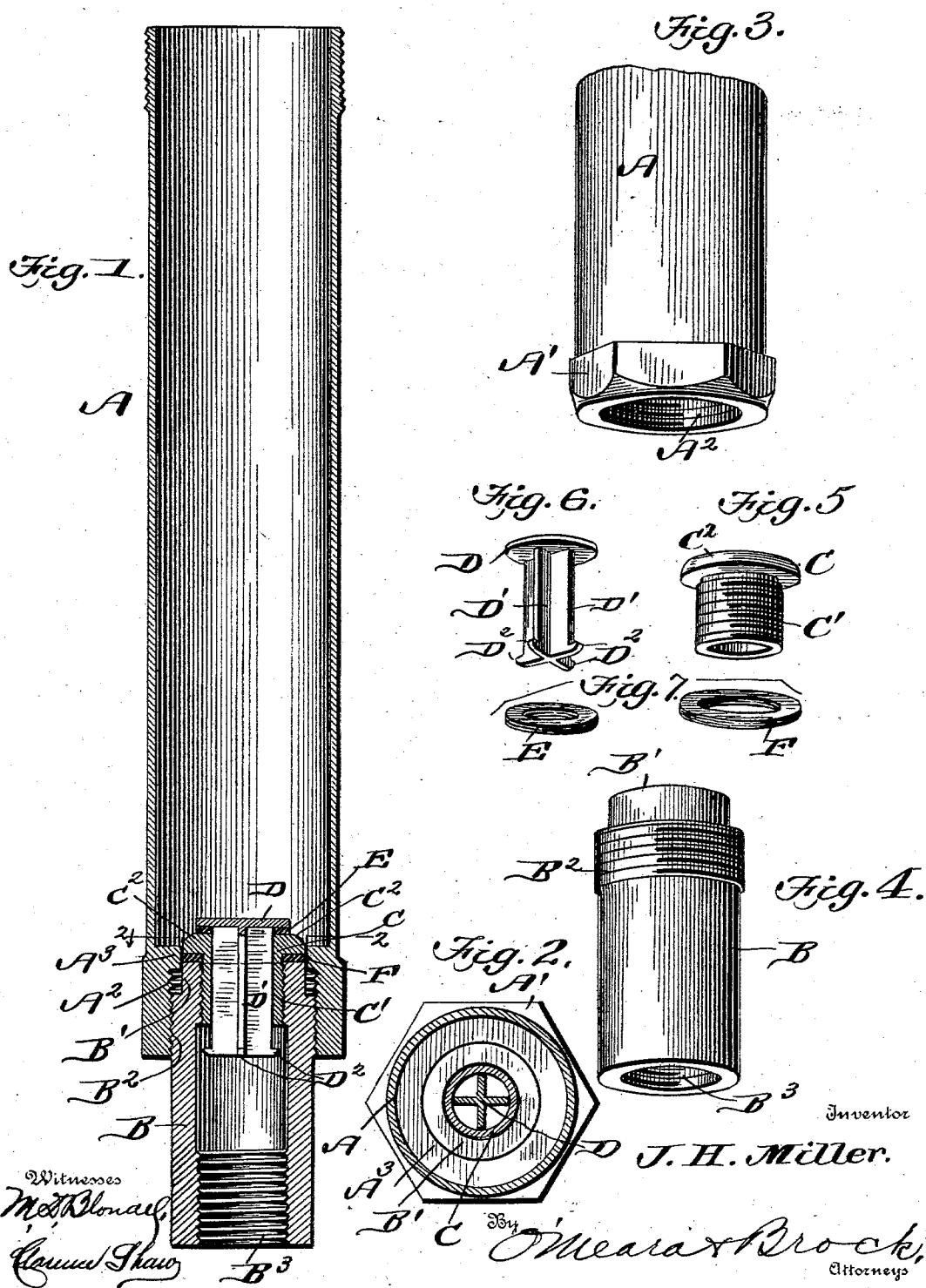
No. 758,377.

PATENTED APR. 26, 1904.

J. H. MILLER.
PUMP CYLINDER.

APPLICATION FILED JUNE 20, 1903.

NO MODEL.



UNITED STATES PATENT OFFICE.

JACOB H. MILLER, OF MEDWAY, OHIO.

PUMP-CYLINDER.

SPECIFICATION forming part of Letters Patent No. 758,377, dated April 26, 1904.

Application filed June 20, 1903. Serial No. 162,420. (No model.)

To all whom it may concern:

Be it known that I, JACOB H. MILLER, a citizen of the United States, residing at Medway, in the county of Clark and State of Ohio, have invented a new and useful Pump-Cylinder, of which the following is a specification.

My invention relates to pump-cylinders; and my object is to secure in such a cylinder the greatest amount of strength possible combined with a simple-light construction; and another object is to secure a tight-fitting joint. A further object is to arrange the washer at this joint in such a manner that it will not be gripped between and cut by shoulders or flanges formed on parts of the cylinder; and a still further object is to arrange a durable valve-seat so constructed that the valve will not be liable to be thrown out of working order by foreign substances accumulating in the valve-seat.

With these objects in view my invention consists of the novel features of construction and combination of parts hereinafter described, particularly pointed out in the claims, and shown in the accompanying drawings, in which—

Figure 1 is a vertical section through my pump-cylinder. Fig. 2 is a section on the irregular line of 2 2 of Fig. 1. Fig. 3 is a perspective view of the lower end of the cylinder-barrel. Fig. 4 is a perspective view of the smaller lower cylinder. Fig. 5 is a perspective detail view of the valve-seat. Fig. 6 is a perspective view of the valve, and Fig. 7 is a perspective view of the washers.

In the construction of my pump-cylinder I employ the cylindrical barrel A, exteriorly threaded at its upper end and having its walls thickened at and adjacent its lower end, the lower end being surrounded by an integral exterior polygonal flange A'. The lower end of the barrel is interiorly threaded, as at A², and above the threaded portion is formed an inner annular flange A³. The lower section—the cylinder B—has a smooth reduced upper portion B', adapted to slide within the flange A³, and below the reduced portion B' the lower cylinder is threaded exteriorly, as at B², this threaded portion engaging the threaded portion A² of the barrel A. At its lower end the

smaller cylinder is interiorly threaded at B³. The reduced portion B' is interiorly threaded.

The valve-seat C consists of an exteriorly-threaded cylindrical portion C', fitting within the end B' of the cylinder B, and of an upper outwardly-extending flange C², the flange being outwardly beveled. The extreme diameter of this flange C² is such that it snugly fits within the flange A³.

The valve comprises a flat disk D, having a diameter exceeding that of the cylindrical portion C', and having downwardly-extending wings D', arranged at right angles to each other. These wings extend through the portion C' and have at their lower ends outwardly-extending lugs D², bent laterally after the valve has been arranged in its seat, limiting upward movement of the valve. A washer E is arranged on the flange C², and the valve-disk D bears on said washer. A washer F is arranged on the upper end of the cylinder B and is held between said cylinder and the under side of the flange C². The cylinder B is threaded into the barrel A until the washer F rests within the flange A³, as shown in Fig. 1. The valve D is raised above the flange A³, and the slope of the flange C² will prevent gravel from collecting and resting on the valve-seat, as such substance would roll to said side and be collected by the flange A³.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A pump-cylinder comprising a barrel, interiorly threaded at its lower end and having an interior annular flange above said threaded portion, a smaller cylinder exteriorly and interiorly threaded adjacent its upper end, said cylinder being threaded into the lower end of the barrel, a valve-seat threaded into the upper end of the smaller cylinder, said seat having a beveled flanged portion, a washer fitting within the flange of the barrel and between the flange of the valve-seat and the end of the smaller cylinder, a washer arranged on said valve-seat, and a disk valve bearing on said washer and having depending wings working through said seat.

2. A pump-cylinder comprising upper and lower sections, the lower section being thread-

ed into the upper section, the said lower section having a reduced non-threaded end portion, an annular flange formed in the upper section adapted to contact with the reduced
5 end of the lower section, a washer resting on said reduced end of the lower section and fitting within the flange of the upper section, a

valve-seat arranged in the upper end of the lower section and bearing on the washer and a valve adapted to coact with the valve-seat. 10
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Witnesses:

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