A. S. PARKE.
Pump.

No. 234,923. Patented Nov. 30, 1880. Fug.L. Fig. 2. Fig. 3. Fig. 5. Witnesses! Inventor:

United States Patent Office.

AMOS S. PARKE, OF BAY CITY, ASSIGNOR OF ONE-HALF TO MERRILL & BACON, OF EAST SAGINAW, MICHIGAN.

PUMP.

SPECIFICATION forming part of Letters Patent No. 234,923, dated November 30, 1880. Application filed October 6, 1880. (No model.)

To all whom it may concern:

Be it known that I, Amos S. Parke, of Bay City, in the county of Bay and State of Michigan, have invented certain new and use-5 ful Improvements in Pumps; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference 10 being had to the accompanying drawings, which form a part of this specification.

Figure 1 is a side elevation of a pump embodying my improvements, showing the pumpbarrel, &c., with the outer casing removed. 15 Fig. 2 is a longitudinal sectional view of the improved pump. Fig. 3 is a detail view of the packing-rings and collar. Fig. 4 is a crosssection through the upper packing-rings; and Fig. 5 is a cross-section through the lower 20 packing-rings, showing the casing and the vertical sections of which the pump-barrel is composed.

This invention has relation to pumps; and it consists of the features of construction and 25 combination hereinafter fully described, and particularly pointed out in the claims.

Referring by letter to the accompanying drawings, C designates the pump-barrel, composed of the sections C', four or more in number, in-30 cased in a casing, D, of tempered steel, which extends from near the top of the barrel C to within about six inches of the bottom of the same, and is connected by screw-threads a near the bottom to the base A'. This casing D 35 also has internal screw-threads, a', at its upper end, to receive the portion or section A at the upper end of the barrel. The object of making the pump-barrel in sections is to readily adapt it to different depths of wells.

B B' represent spring-sleeves having inclined slots B², and provided with shoulders B³ B⁴. The slots are to permit the springsleeves to be contracted and expanded, and the shoulders are to form bearings for the sec-45 tion A and the shoulder b of the barrel C when the sleeves are held in place. The sleeves are telescoped or slipped one within the other, as shown, before being placed within the casing D. E designates the plunger or piston, which

works through A B B' C. G are set-screws 50 in the casing D, for the purpose of tightening the spring-sleeves B B' around the plunger E. The object of the spring-sleeves B B' is to form a tight packing around the plunger E, and by having said sleeves adjustable I am 55 enabled to adjust them correspondingly with the contraction and expansion of the metallic tube D in cold and warm weather.

I I' designate ordinary packing-rings having diagonal slots J.

60

H designates a collar, that fits tightly on the plunger E, between the packing-rings I I', to prevent the passage of water between them and the plunger. Without the collar H water would pass from I to I' and obstruct the suc- 65 tion. The collar H, with the assistance of the rings I I', packs the lower end of the plunger and makes the suction perfect, and said rings being slotted, as shown, they will be correspondingly adjusted with the contraction and 70 expansion of the tube D in cold and hot weather, thus at all times insuring a tight packing around the lower end of plunger.

The operation of my improved pump being similar to all suction-pumps, further descrip- 75 tion is deemed unnecessary.

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

1. In a pump, the combination, with the plun- 80 ger E and the pump-barrel C, constructed in sections C', of the spring-sleeves BB', shouldered, as shown, the casing D, set-screws G, and the section A of the pump-barrel, constructed and operating substantially as and 85 for the purposes set forth.

2. In a pump, the combination, with the plunger E and barrel C, of the packing-rings I I' J and the collar H, fitted tightly to the plunger E, between the rings I I', substan- 90 tially as and for the purposes set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

AMOS SYLVESTER PARKE.

Witnesses:

A. L. STEWART, C. J. BLOOMFIELD.