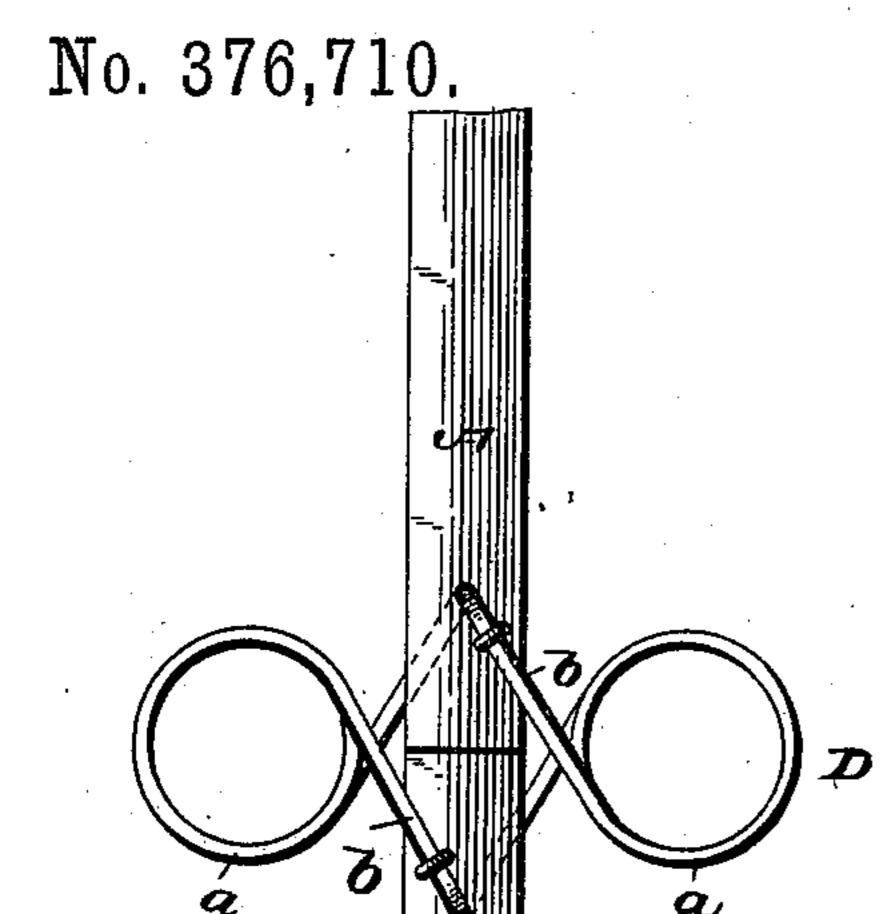
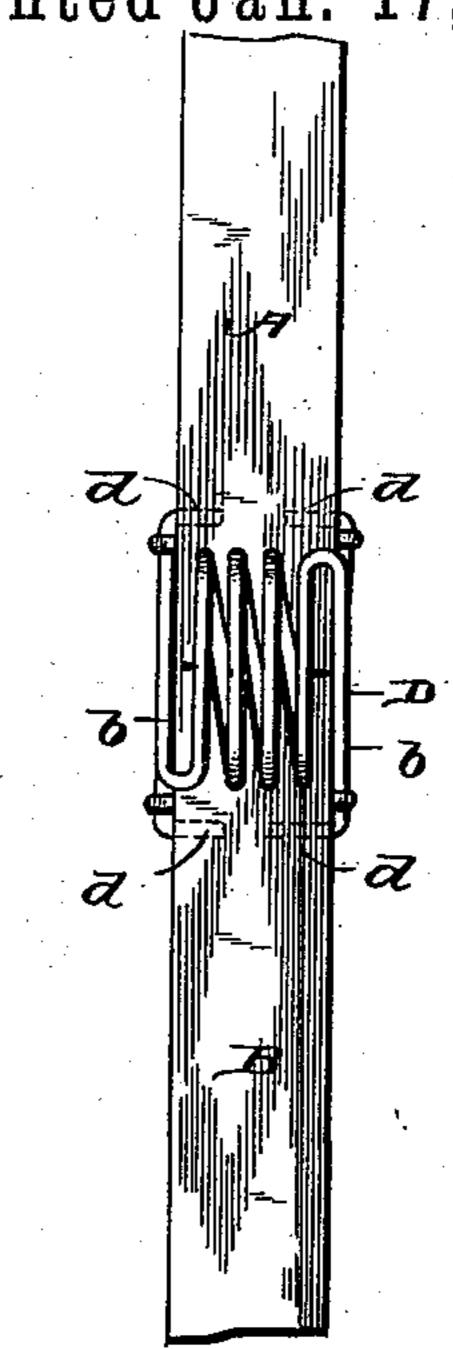
## W. H. H. DABNEY.

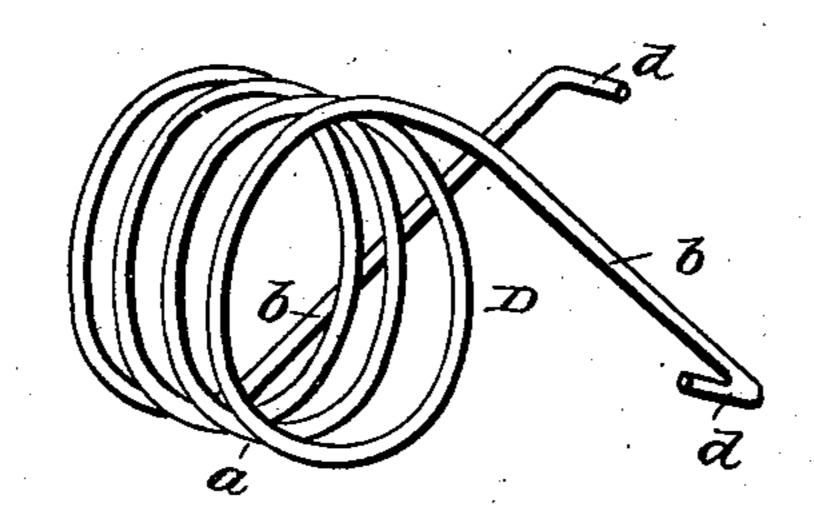
ATTACHMENT FOR WINDMILL PUMP RODS.



Patented Jan. 17, 1888.



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WITNESSES

1. Turpun

H. H. Walney.

INVENTOR

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Attorneys

## United States Patent Office.

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## ATTACHMENT FOR WINDMILL PUMP-RODS.

SPECIFICATION forming part of Letters Patent No. 376,710, dated January 17, 1888.

Application filed September 26, 1887. Serial No. 250,696. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. H. DABNEY, a citizen of the United States, residing at Oakland, in the county of Pottawattamie and State of Iowa, have invented certain new and useful Improvements in Attachments for Windmill Pump-Rods; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The object of this invention is to provide a cheap and simple means for preventing the harsh and jarring movement so common to windmill-rods, and the same might be advantageously employed in connection with the piston-rod of a pump or the like.

The invention will be fully understood from the following description and claim when 20 taken in connection with the annexed drawings, in which—

Figure 1 is a side view of a portion of a wind-mill-rod, showing my improvements applied. Fig. 2 is a view of another side of the same. Figure 3 is a perspective view of one of the springs removed from the rod.

Referring by letter to the said drawings, A B indicate two sections, which in the present illustration I shall refer to as a "windmill-rod," 30 although it may be that of a pump or the like. The rod, it will be seen, is made in two sections, so as to allow the same to give lengthwise, and the ends are connected by a spring or yielding connection, as will be presently

35 explained.

D indicates a spring, which may be formed of steel or other suitable material. This spring has its body portion coiled, as shown at a, and the outer coil or whirl at each end is approximately straight, as indicated at b, being bent at right angles, so as to form short arms d, which are designed to be driven into the sections of the rod. It should be observed that these branches are secured to opposite sections

of the rod, so that a yielding connection is had. 45 By having one of the branches of the spring to each section of the rod it will be seen that when the said sections have been separated the coils will be contracted, thereby increasing the action of the spring, which will exert great 50 force to return the sections to meet again. Thus it will be seen that when any sudden jerk or undue motion, which may result in strain to some parts of a mill, takes place, by the action of these spring connections the rod will be allowed to yield, and thereby ease its action and prevent damage to other connecting parts.

In operation I employ two of these springconnections, such as shown in Fig. 3 of the drawings, and I arrange them on opposite 6c sides of the rod and secure their free ends into the sections of the said rod, so that when the parts are acted upon so that strain may occur the spring will be contracted a little, thereby exerting greater force to return the parts of 65 the rod as they increase the distance of separation. While I have shown and described these springs as being made in two parts and one placed on each opposite side of the meeting ends of the rod, yet it is obvious that two 70 coils may be formed from a single piece of material, in which case a straight transverse portion would be formed to pass through or be secured to one section of the rod.

Having described this invention, what I 75 claim is—

The combination, with a windmill pumprod, of springs having coils, as described, and having their opposite ends connected to the opposite sections of the rod, substantially as 80 specified.

In testimony whereof I affix my signature in presence of two witnesses.

## WILLIAM H. H. DABNEY.

Witnesses:

C. H. CONVERSE,

T. F. KING.