(No Model.)

C. C. SMITH.

DEVICE FOR OILING SLIDES FOR ENGINES.

No. 284,768. Patented Sept. 11, 1883.

FIG. 1

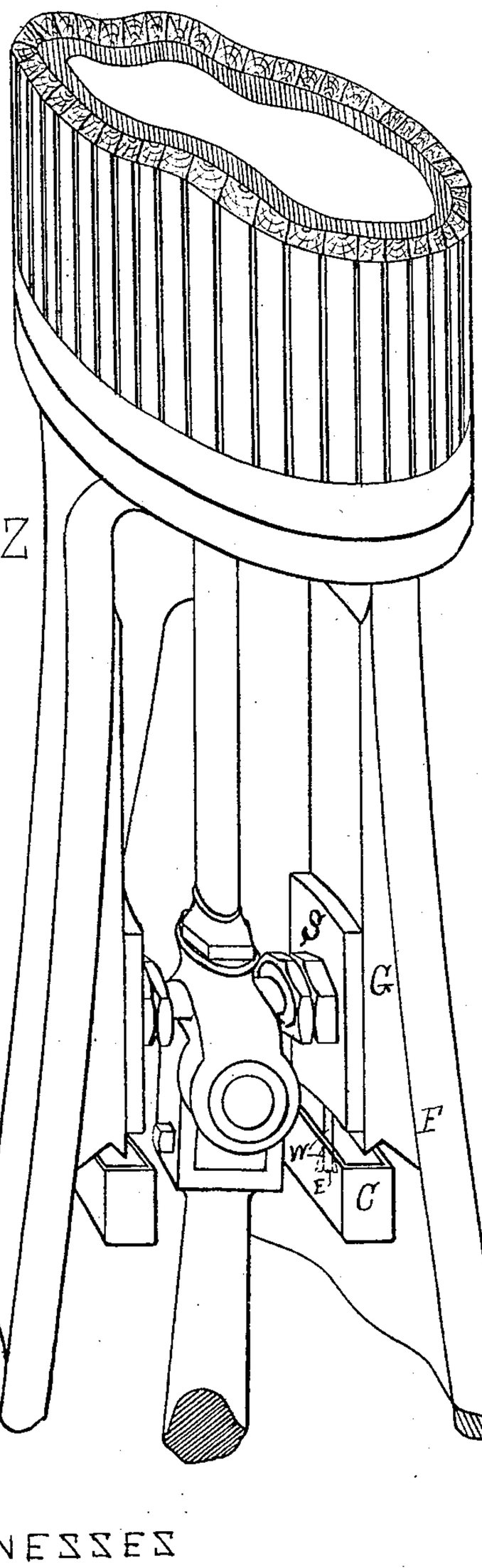

FIG. 2

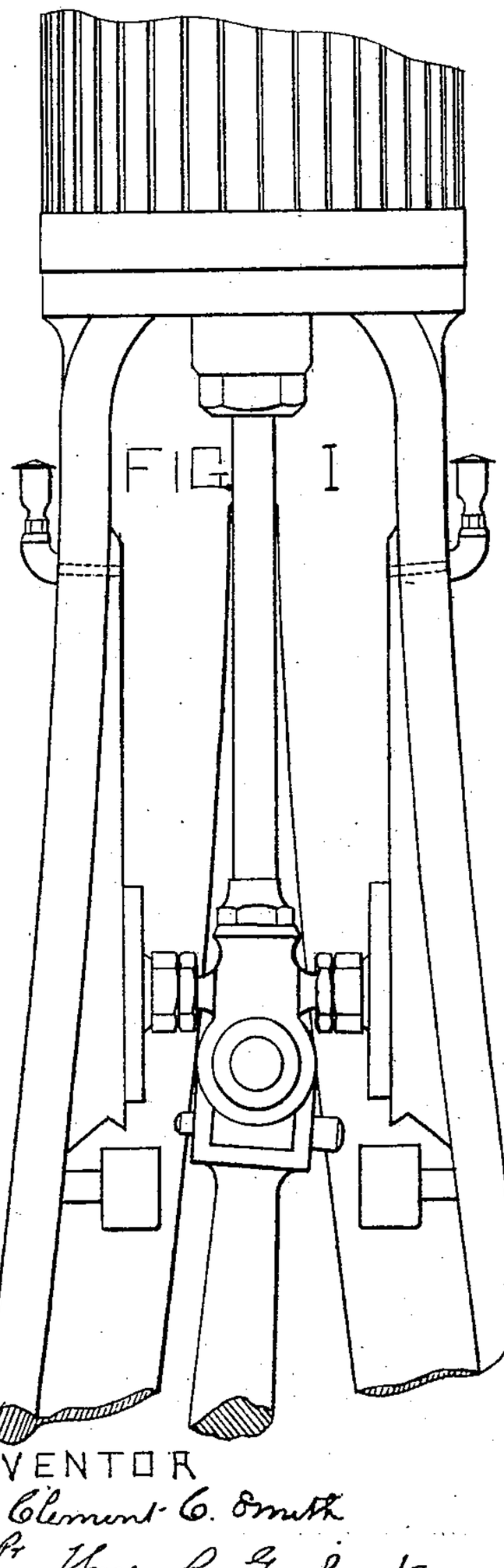

FIG. 3

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DEVICE FOR OILING SLIDES FOR ENGINES.

SPECIFICATION forming part of Letters Patent No. 284,768, dated September 11, 1883.

Application filed July 20, 1883. (No model.)

To all whom it may concern:

Be it known that I, CLEMENT C. SMITH, a citizen of the United States, residing at Lancaster, in the county of Lancaster and State of Pennsylvania, have invented certain Improvements in Oiling Slides for Engines, of which the following is a specification.

My invention relates to the oiling of the cross-head slides of vertical engines. These slides are at present oiled by having an oil-cup outside of the frame opposite the top of the guide, between which guide and the cup there is a small passage through the frame, through which the oil gradually drips onto and down the face of the guide. The trouble here is that the oil-cup frequently becomes empty without its being noticed, and the bearing-faces of the slide and guide cut each other before it is known. I obviate this difficulty by placing the oil-cup on the inside of the frame below the guide and attaching a dip-wire to the lower end of the slide. This dip-wire enters the cup at each downstroke of the cross-head, and as the cross-head rises draws up sufficient oil to lubricate the guide. In the first case the oil is used but once, and then lost, while with my device the oil is caught by the cup as it drips down, and is used over and over again. With the old arrangement the oil is liable to become exhausted, while with mine it is impossible, with little trouble and ordinary care, for the cup to get empty. To assist in spreading the oil over the face of the guide, the inner face of the slide has very slight grooves radiating from the center of its lower edge. As just explained, the objects of my invention are, first, to oil the guides by means of a dip-wire; and, second, to prevent the waste of oil by securing it after it is used. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is an elevation of an engine having the old oil-cup; Fig. 2, a perspective of an engine using my device; and Fig. 3, a view of the inner surface of the slide.

Similar letters refer to similar parts throughout the several views.

The oil-cup C is attached to the inside of the frame F, just below the guide G. A dip-wire, W, having the lower end, E, broad and flat, is fastened to the bottom of the slide *s*, and when passing up and down with the slide bears against the guide. The wire is of such length that when the slide is at its lowest point the lower end of the wire reaches down into the oil-cup, and as the slide rises, draws with it sufficient oil for lubricating the guide. The inner surface of the slide has slight grooves radiating from the middle of its lower end on the inside or bearing-face to assist in distributing the oil over the face of the guide, as shown in Fig. 3.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. For the lubricating of guides for engines, the combination of the slide, having a dip-wire attached to its lower end, and an oil-cup fastened to the inside of the frame below the guide-plate, substantially as herein specified.

2. For the lubricating of guides for engines, the combination of the slide, having radiating grooves in its inner or bearing face, and a dip-wire attached to its lower end, and an oil-cup fastened to the inside of the frame below the guide-plate, as herein set forth.

CLEMENT C. SMITH.

Witnesses:

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WM. R. GERHART.