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Diler.

16. 93772.

Patenned Aug 17. 1369.

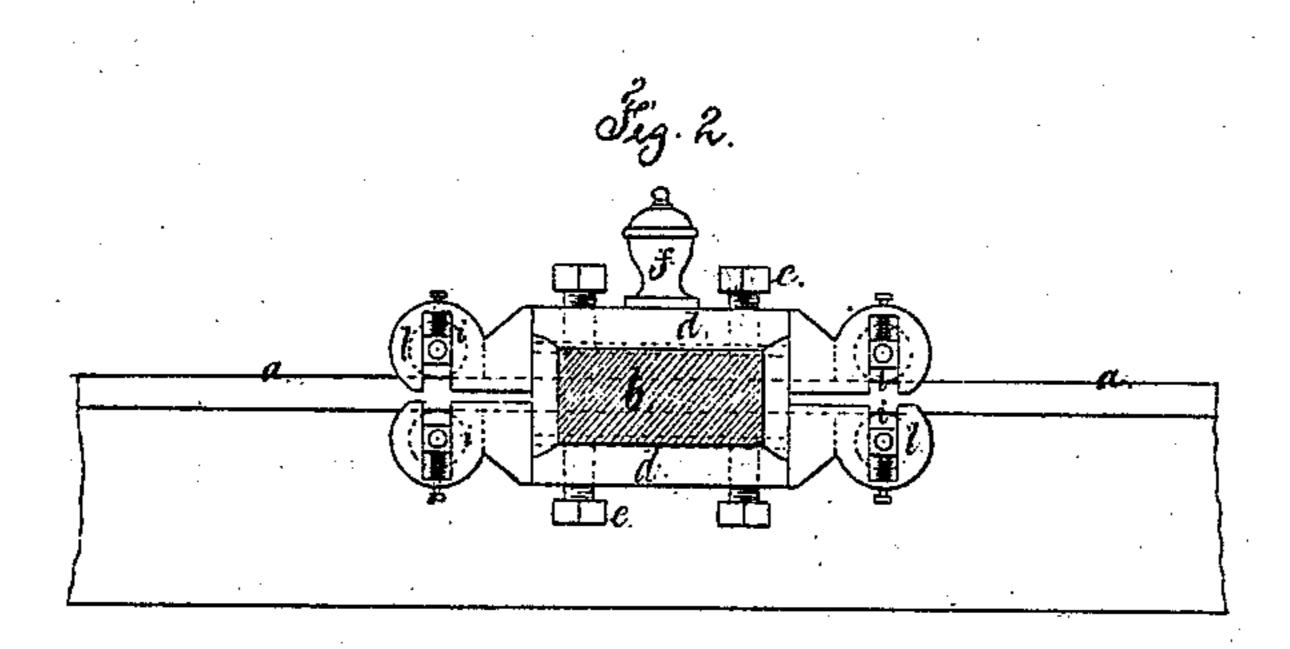
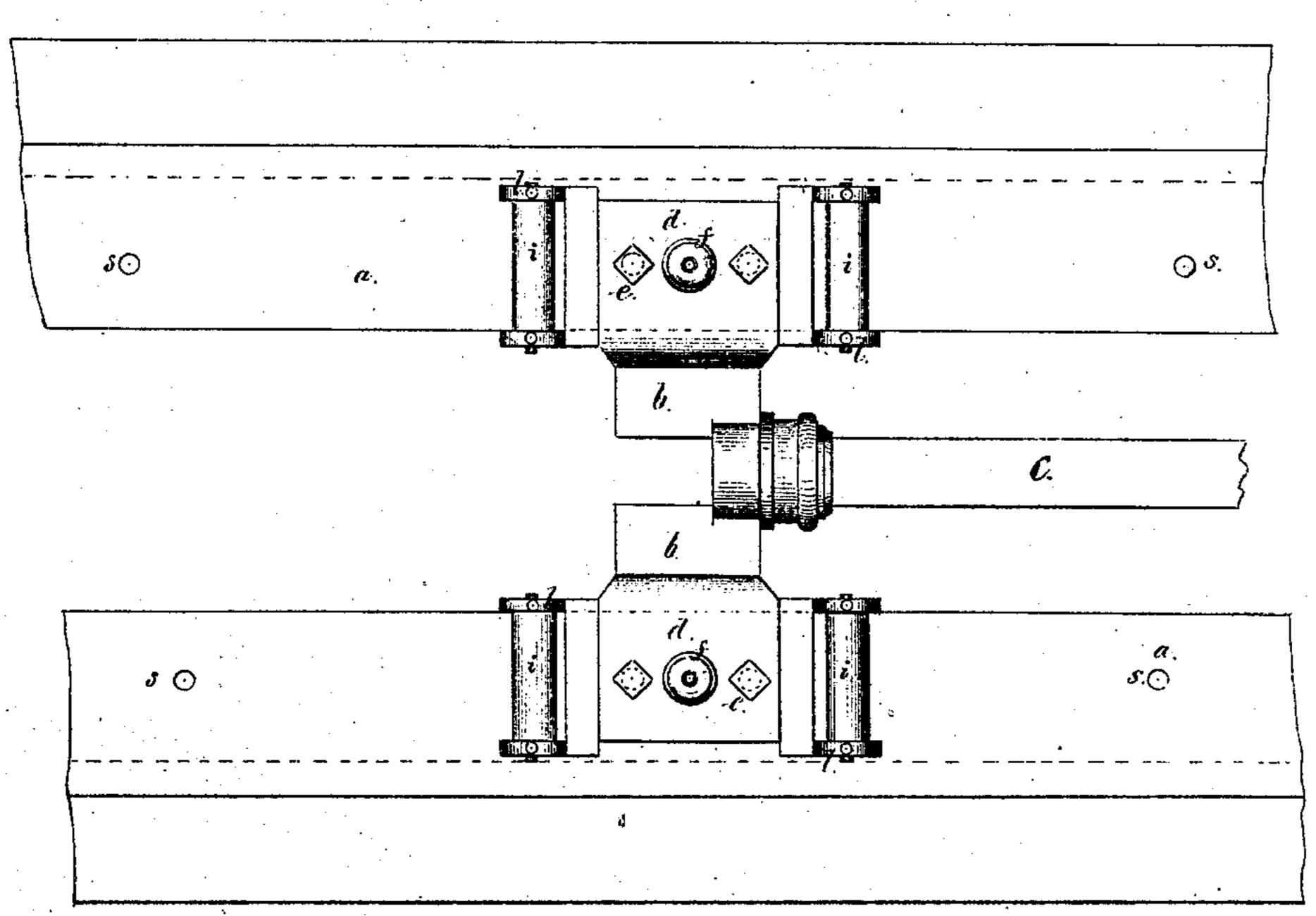


Fig. 1.



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Anited States Patent Office.

CHRISTOPHER C. TRACY, OF NEW YORK, N. Y., ASSIGNOR TO HIM-SELF AND JAMES E. GRANNISS, OF SAME PLACE.

Letters Patent No. 93,772, dated August 17, 1869.

IMPROVED OILER FOR THE SLIDES OF STEAM-ENGINES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, Christopher C. Tracy, of the city and State of New York, have invented and made a new and useful Improvement in Oilers for the Slides and Journals of Engines, &c.; and I do hereby declare the following to be a full, clear, and exact description of the said invention, reference being had to the annexed drawing, making part of this specification, wherein—

Figure 1 is a plan of the said oiler, as applied to

the slide of a horizontal engine, and

Figure 2 is an elevation of the said oiler, the cross-

head being shown in section.

Similar marks of reference denote the same parts. Great difficulty has heretofore been experienced in lubricating the slides of engines, as the sliding movement of the boxes or gibs of the cross-head causes the oil to be forced or scraped along on the slide to the ends of the movement, at which points the accumulation drops off or runs away.

It frequently happens that the slides become dry, and then the parts are rapidly injured by friction, and when the boxes or gibs do not rest properly on the slides, the oil runs out rapidly from the oil-cup.

My invention is to obviate the before-mentioned difficulty, and consists in elastic absorbent "oil-holding" rollers, applied on each side of the slide, to take up surplus oil at the extremes of the stroke, and spread the same upon the slide, throughout the length of the same, on the return movement, thus constantly Inbricating the slide, and effectually preventing the parts working loose and the oil running out, the rollers being supported in yielding bearings.

These devices are also available with journals and

bearings.

In the drawing—

a a represent the slides; b, the cross-head upon the piston-rod c;

dd are the boxes or gibs set up by the screws ee; and

ff represent oil-cups, which may be used. These parts may be of any ordinary construction, as my invention does not relate to these.

At each side of the cross-head I apply elastic absorbing "oil-holding" rollers ii, the axes of which are set in bearings l l, and springs may be employed to keep the rollers ii in contact with the surface of the slides a a.

I prefer to use rollers made of a strip of woollen fabric, and I apply rollers at each side of the crosshead, so as to act on the under side of the slides a.

It will be evident that, as the gibs of the crosshead press the oil along upon the slide, that, at the return movement, the oil is taken by the absorbent elastic roller and spread upon the slide again, thus keeping the surface lubricated, and this takes place at each end of the stroke and at both sides of the slide.

With horizontal engines, I prefer to employ two or more holes s, through the slides, so as to supply oil to the under sides of the slides by the oil that passes

through these holes.

It will be evident that this invention, when applied to the box of a journal, will act in the aforesaid manner to spread the oil and prevent the weight of the shaft, or the strain thereon, forcing the oil out of the box.

In this case I prefer to make an incision in the under side of the cap of the journal-box sufficiently large to retain a roller of elastic porous material, to receive and hold the oil as it runs upon such roller from the oil-cup.

I do not claim a roller applied to raise oil out of an oil-holding receptacle and apply the same to a journal.

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

The elastic absorbent "oil-holding" rollers, supported in yielding bearings, and applied in substantially the manner specified, to spread the lubricatingmaterial on the slides or journals of engines and other machines, for the purposes specified.

In witness whereof, I have hereunto set my signature, this 20th day of April, A. D. 1869. CHRISTOPHER C. TRACY.

Witnesses:

GEO. D. WALKER, GEO. T. PINCKNEY.