

J. H. SMITH.

Wick Raiser.

No. 76,836.

Patented April 14, 1868.

Fig. 1.

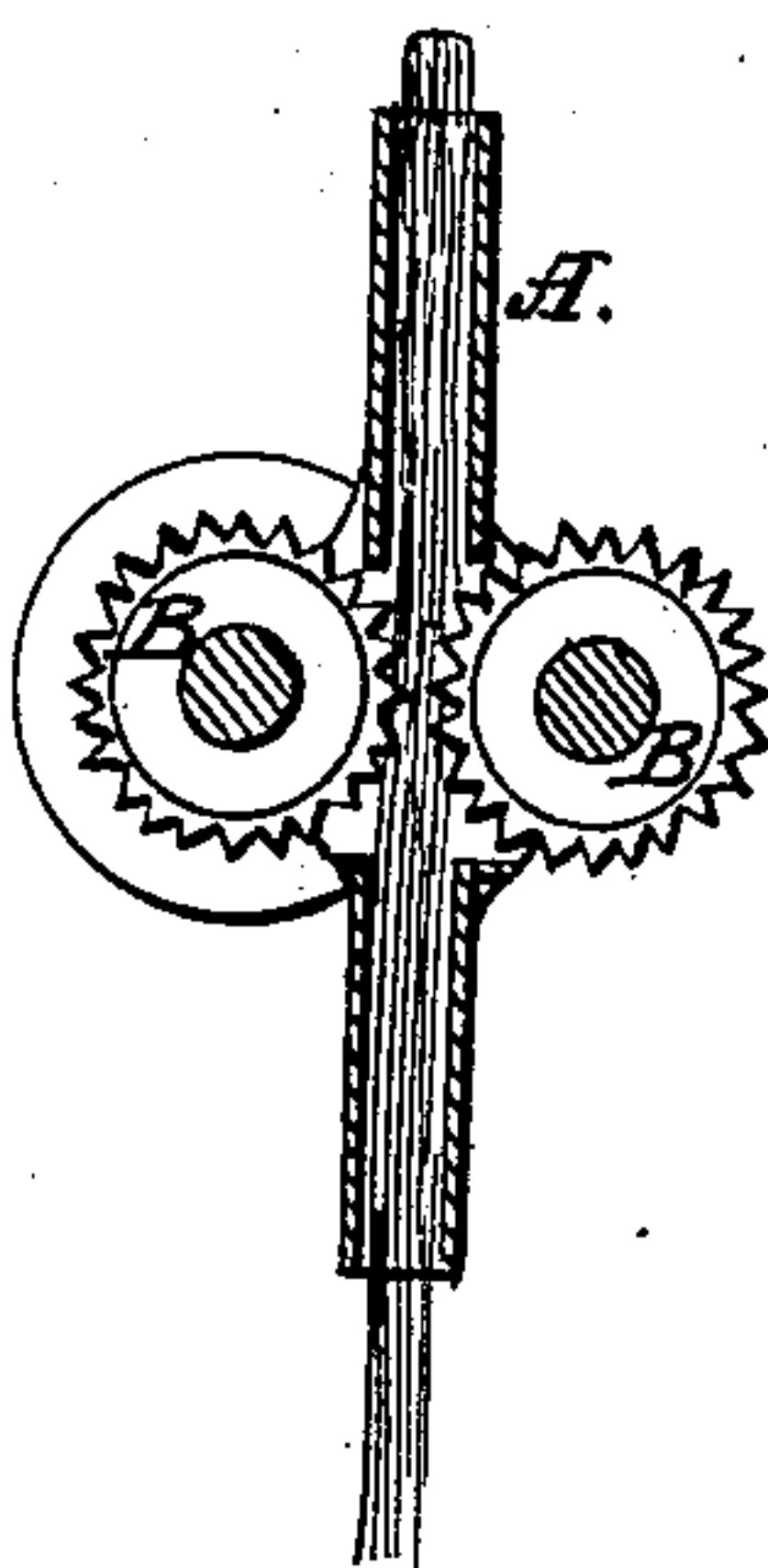
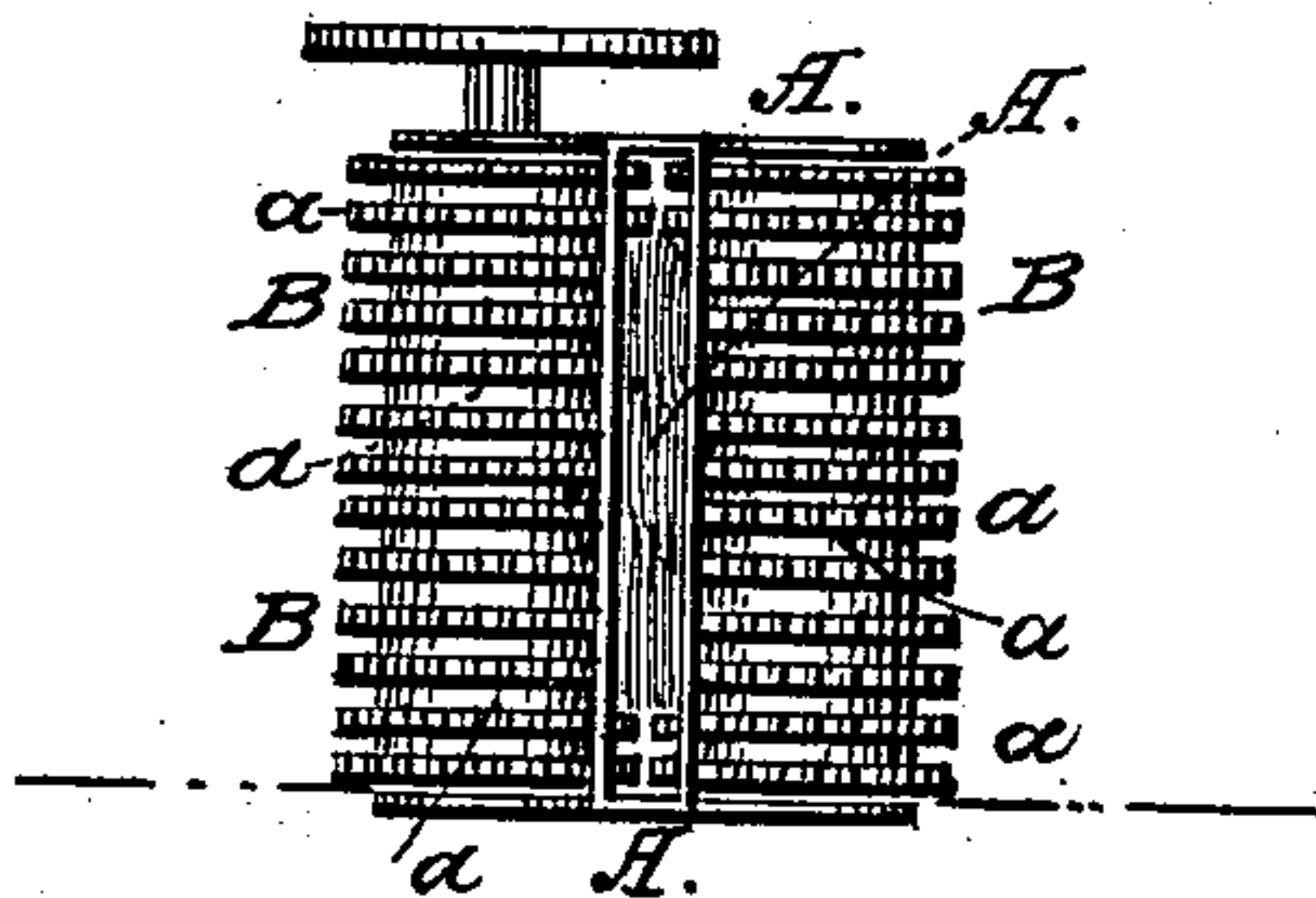


Fig. 2.



Witnesses
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J. HOMER SMITH, OF BREWSTER STATION, NEW YORK.

Letters Patent No. 76,836, dated April 14, 1868.

IMPROVEMENT IN LAMPS.

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, J. HOMER SMITH, of Brewster Station, in the county of Putnam, and State of New York, have invented a new and improved Lamp-Burner; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

Figure 1 represents a vertical transverse section of my invention.

Figure 2 is a plan or top view of the same, both views being drawn on an exaggerated scale.

Similar letters of reference indicate corresponding parts.

This invention relates to a new lamp-burner, which is so arranged that the flame cannot pass through the wick-tube into the oil-reservoir, even if the wick should not fit close within the tube.

The invention consists in arranging two feeding-cylinders opposite each other, and on opposite sides of the tube. These cylinders are so close together, that, even if no wick is in the tube, a flame cannot pass through the same. The cylinders are toothed, with grooves arranged around them and between the teeth, for the purpose of allowing the upward passage of the oil. The cylinders have the full length of the tube, so as to protect the whole interior of the tube.

A, in the drawing, represents the wick-tube of an ordinary or suitable lamp-burner.

B B are two toothed cylinders, arranged opposite each other in stationary bearings on the tube, and fitting through the same, so that the wick will be held between them. The two cylinders are so close to each other that a flame cannot pass through the tube if the wick is too small, as in fig. 2.

Grooves *a a* are arranged around the cylinders, to leave oil-passages, for, as the cylinders are so close to each other, it is probable that the wick will be compressed between them, and its pores might thereby be closed, so as to make it unfit for the feeding of the flame. By having the grooves in the cylinders, sufficient parts of the wick will remain uncompressed to allow the free upward passage of oil.

The length of the cylinders is equal to that of the interior of the tube.

By the use of this invention, frequent explosions, now occasioned by too small wicks, and by consequent channels in the tubes, will be avoided.

I am aware that two feed-rollers have already been used on lamp-burners, but, from the foregoing description, it will appear that my invention is altogether different from or at least a decided improvement on the same.

The cylinders can be entirely distinct or separate from feed-wheels, and placed in the lower end of the wick-tube, and used only to prevent explosions, having feed-wheels in the usual manner to raise the wick; but it would require a little more force to draw the wick up between the cylinders than in the common tube, and none of the feed-wheels now in use have the necessary power, neither could they force the wick down between the cylinders into the oil-reservoir.

I claim as new, and desire to secure by Letters Patent—

As an improved article of manufacture, the device for preventing the descent of flame in lamps, consisting of the cylinders B B, mounted in fixed bearings in the wick-tube, and as long as said tube is wide, when the outer surface of the cylinder is formed with serrated ribs, extending entirely around the cylinder, grooves being formed between the ribs, as described, for the purpose set forth.

J. HOMER SMITH.

Witnesses:

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