

Lighting Device.

Patented Sept. 13, 1870.

A vertical tube with a bulb at the bottom. The bulb is labeled 'a'. The tube has a constriction labeled 'A'. Above the constriction, the tube is labeled 'a'' and 'b'.

A diagram showing a large circle with a smaller circle inside it. The smaller circle is labeled e and the larger circle is labeled B .

A diagram of a garment, possibly a shirt or blouse, with a collar and a pocket. The collar is labeled 'C' and the pocket is labeled 'B'.

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Letters Patent No. 107,209, dated September 13, 1870; antedated September 3, 1870.

IMPROVEMENT IN TAPER-HOLDERS.

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, HENRY B. ADAMS, of the city, county and State of New York, have invented certain Improvements in the Making and Constructing Taper-Holders.

The nature and object of my invention are the making and constructing taper-holders.

The taper-holder A is constructed of sheet metal, cut into oblong strips of the desired length and breadth. The strips are then bent or made into a circular or tubular form, having a narrow space or slot, *a*, between the two edges. At the extreme or upper end, at *a'*, the space or slot *a* is widened to about double the space of the slot in the tube.

At the end of the tube a ferrule, *b*, is affixed to retain the tube in its proper form, and to retain the spring or clamps from being pressed off the tube, a sliding clamp or spring, *c*, is also made of sheet metal, to conform to the outer surface of the tube, passing through the slot *a* into the tube, and conforming nearly to the inner surface of the tube, so constructed that, when it is in the wide portion of the slot, the spring or clamp *d* opens, so that the taper can easily be pressed into the spring or clamp.

The clamp *d* being pressed downward into the narrow portion of the slot, the spring or clamp is then pressed together and clasps the taper, by which it can be moved up and down at pleasure.

The tube thus formed is put into a wooden handle, B, which is constructed in the usual form, an annular

groove, *e*, being cut into the handle of the circumference and thickness of the tube, into which groove the tube A is pressed, where it is firmly held, thus forming a taper-holder of the greatest possible strength and simplicity.

Figure 1 represents a complete view of the taper-holder.

Figure 2 represents an enlarged view of the end of the tube.

Figure 3 represents an enlarged cross-section of the spring or clamp when open.

Figure 4 represents an enlarged cross-section of clamp and tube, the tube being closed.

Figure 5 represents an enlarged view of the handle.

Figure 6 represents an enlarged longitudinal section, both figures, 5 and 6, showing the annular groove for receiving the tube.

I claim—

1. In combination with the groove *a*, having an enlarged portion, *a'*, the sliding clamp *c*, arranged and operating as described.

2. The handle B, constructed with an annular groove, *e*, and central cord *e*, in combination with the taper-holder A, with groove *a*, enlarged portion *a'*, and the sliding clamp *c*, all constructed and arranged to operate as described.

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Witnesses:

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