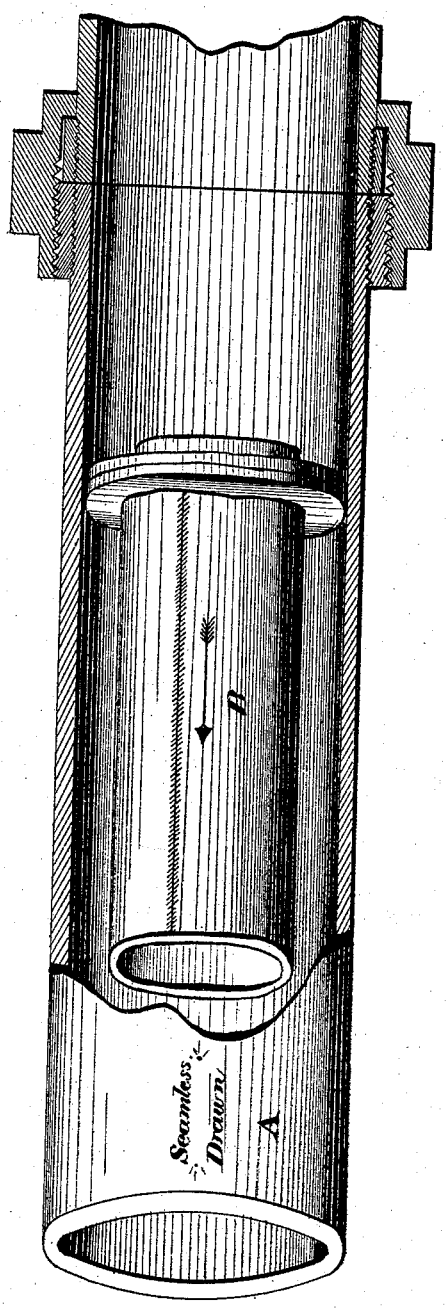
W. H. BAILEY.

PNEUMATIC RAILWAY.

No. 182,545. Patented Sept. 26, 1876.



WITNESSES

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WILLIAM H. BAILEY, OF NEW YORK, N. Y., ASSIGNOR TO AMERICAN TUBE WORKS, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN PNEUMATIC RAILWAYS.

Specification forming part of Letters Patent No. **182,545**, dated September 26, 1876; application filed September 13, 1876.

To all whom it may concern:

Be it known that I, WILLIAM H. BAILEY, of the city, county, and State of New York, have invented a new and Improved Pneumatic Conductory; and I hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing, forming a part of this specification, in which the figure represents a tube or cylinder forming the conductory, and containing a movable carrier.

The object of my invention is to provide a cheaply-constructed conductory that is perfectly cylindrical in form, of great density, with hard and polished surfaces, and capable of being bent to conform to circuitous passages, through which a carrier is forced by means of air pressure; and my invention consists in the combination of a drawn or rolled seamless metallic tube or cylinder, and a movable carrier, as hereinafter fully described.

In the drawing, A represents the tube or cylinder partly broken away, to show the arrangement of a movable carrier, B. This tube or cylinder is usually constructed of brass by first casting the same in suitable molds of the size and form required, and then subjecting it to the familiar process of making drawn or rolled seamless tubes.

This process of manufacture will produce a tube of a uniform diameter throughout its length, and with a highly-polished surface, and requires no further finishing. Its perfect cylindrical form secures a uniform bearing for every portion of the circumferential flanges of the carrier, which equally distributes the pressure, and prevents a leakage of air; and also, the tube being drawn or rolled in the direction of its length, the fiber of the metal is directed correspondingly, which materially reduces the friction created, (and consequent evolution of heat,) by the swift passage of the carrier.

The carrier is not liable to be injured by passing over rough and uneven surfaces, which would not only impede its progress and require an additional expenditure of power, but would soon destroy it.

These carriers are usually constructed of felt in the form shown, but any of the well-known forms may be used.

Having thus fully described my invention in the manner in which I prefer to apply it, I do not, however, wish to be confined to the preliminary steps of the process referred to previous to subjecting the tube or cylinder to the drawing or rolling process, as it is obvious that a drawn or rolled tube may be produced from a blank of sheet metal bent to form, and its edges secured by brazing or otherwise, instead of casting the material, without departing from the spirit of my invention; but

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

The combination of a drawn or rolled seamless metallic tube or cylinder, and a movable carrier, substantially as and for the purpose set forth.

WILLIAM H. BAILEY.

Witnesses:

EDW. KENT, Jr.,

CHAS. W. FORBES.