(No Model.)

C. H. GOEBEL.

SWITCH FOR PNEUMATIC TUBES.

No. 393,700. Patented Nov. 27, 1888.

Fig. 1.

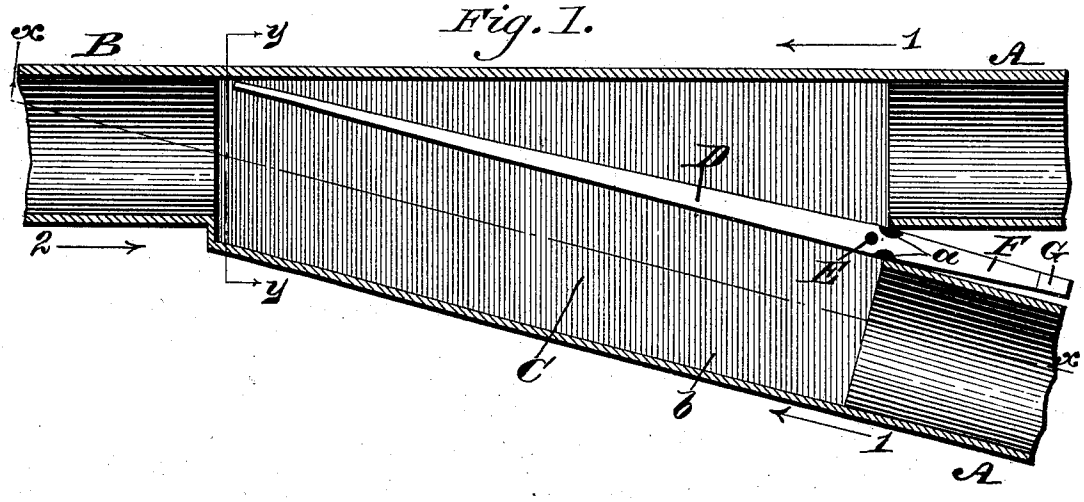


Fig. 2.

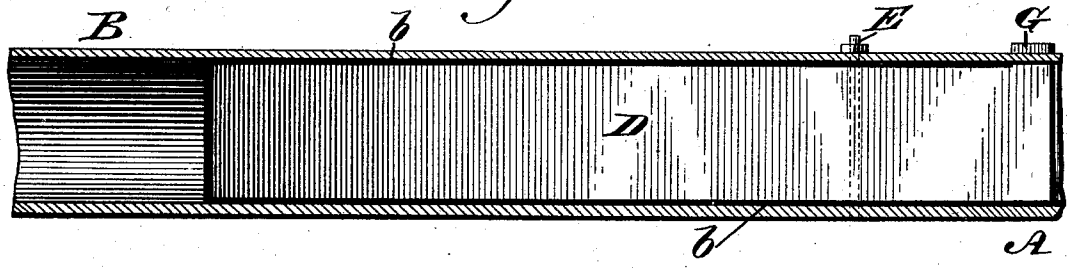
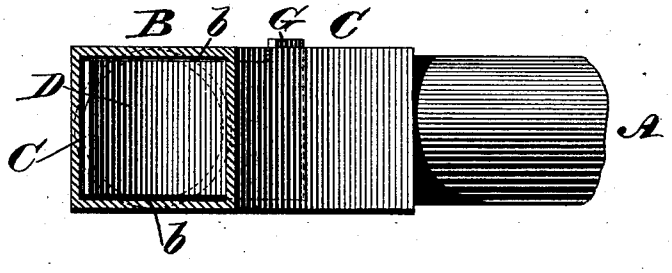


Fig. 3.



Witnesses.
P. F. Eagle.
L. Domville.

Inventor.
C. H. Goebel.
By his Attorneys
Wedderburn & Kintner

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

CHRISTIAN H. GOEBEL, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR, BY MESNE ASSIGNMENTS, TO ARTHUR J. INGRAHAM, TRUSTEE, OF SAME PLACE.

SWITCH FOR PNEUMATIC TUBES.

SPECIFICATION forming part of Letters Patent No. 393,700, dated November 27, 1888.

Application filed December 10, 1887. Serial No. 257,482. (No model.)

To all whom it may concern:

Be it known that I, CHRISTIAN H. GOEBEL, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Switches for Pneumatic Tubes, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of a switch which is located at the place of confluence of tubes of a pneumatic propeller, so as to open either pipe for the passage of the piston, as hereinafter described.

Figure 1 represents a horizontal section of a switch for a pneumatic propeller embodying my invention. Fig. 2 represents a longitudinal vertical section thereof on line *x x*, Fig. 1. Fig. 3 represents a transverse vertical section thereof on line *y y*, Fig. 1.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings, A represents two tubes, which are confluent or diverging, as the case may be, and connected with the single tube B, a chamber, C, existing between said tubes A B, and within the same is a swinging plate, piece, or switch, D, which has a vertical axis, E, and extends from the tubes A to the tube B, the axis E being adjacent to the tubes A. The switch is extended outside of the chamber C, forming an arm, F, which is between the tubes A and readily accessible, said arm having a knob or handle, G, for operating purposes. The end of the chamber C at its junction with the tube B is wider than the said tube, forming at one side thereof a corner space, wherein the free end of the switch can enter, and thereby leave the bore of the tube being used entirely unobstructed.

It will be seen that when the piston of the propeller is traveling in the direction of the arrows 1 in either of the tubes A the switch is moved by said piston so as to close or cut off the other tube A, whereby air is prevented from entering the latter tube.

Should the piston be traveling in the direction of the arrows 2 in the tube B, and it is desired to direct the same in either of the tubes A, the switch D is moved in the proper direction by the outside arm, F, so as to close one of said tubes and open the other. The sides of the switch D at or about their place of contact with the tubes A A are packed, as at *a*, to prevent the escape of air thereat.

The top and bottom edges of the switch are packed, as at *b*, for forming tight joints with the contiguous walls of the chamber C.

I am aware that it is not new to provide a switch for confluent tubes having its axis at the junction of the said tubes, and such I do not claim; but I am not aware that it is old to form said switch as herein described.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A pneumatic propeller having the switch D, with axis E, the said switch having a top and end packing, *b*, and a side packing, *a*, substantially as and for the purpose set forth.

2. A pneumatic propeller having the confluent tubes A A and B and the chamber C, the latter being at its junction with the tube B wider than the said tube, the switch D, with vertical axis E, the arm F, and handle G, the said switch having the top and end packing, *b*, secured thereto, and having on its sides the packing *a*, said parts being combined substantially as described.

C. H. GOEBEL.

Witnesses:
JOHN A. WIEDERSHEIM,
JAMES F. KELLY.