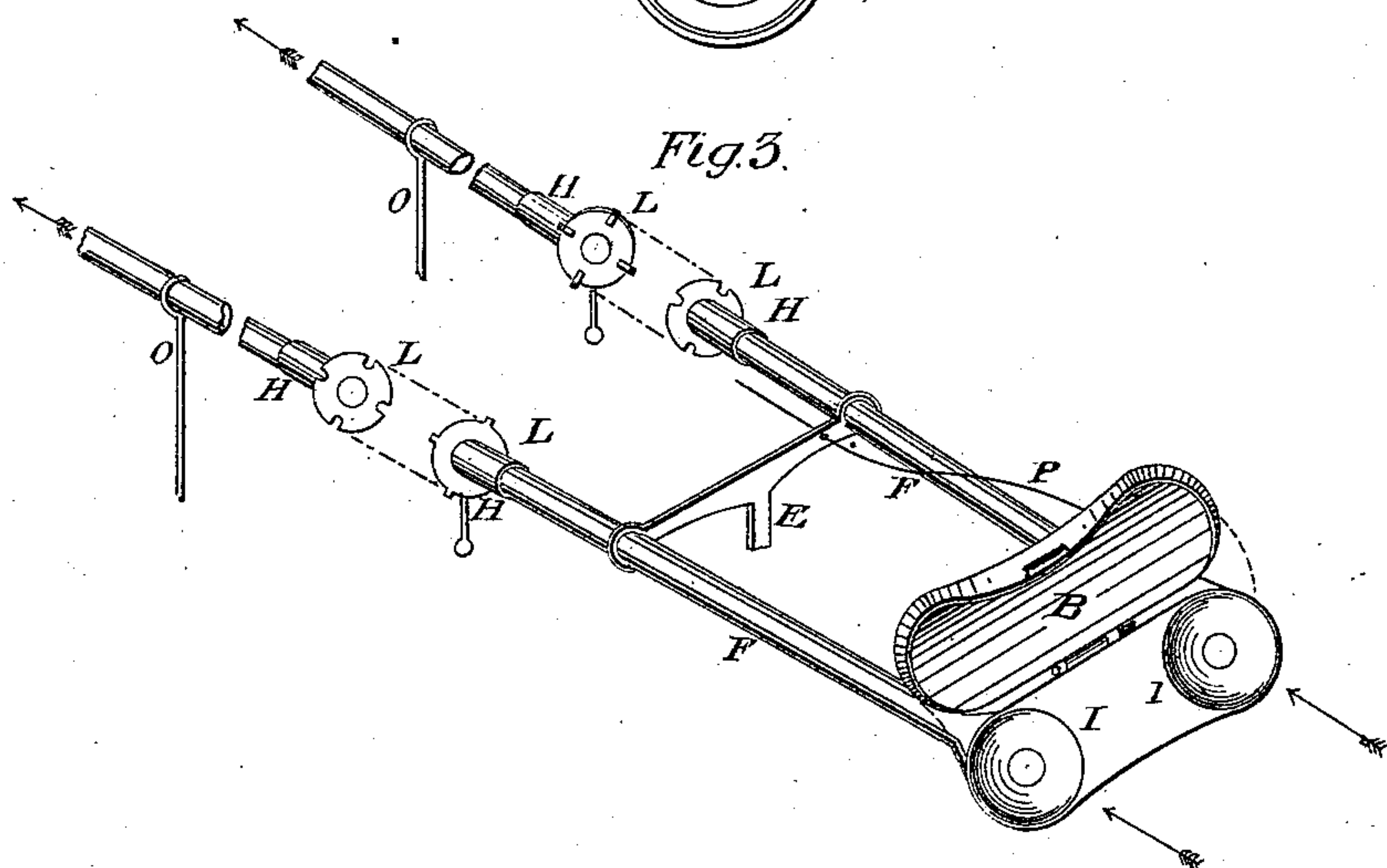
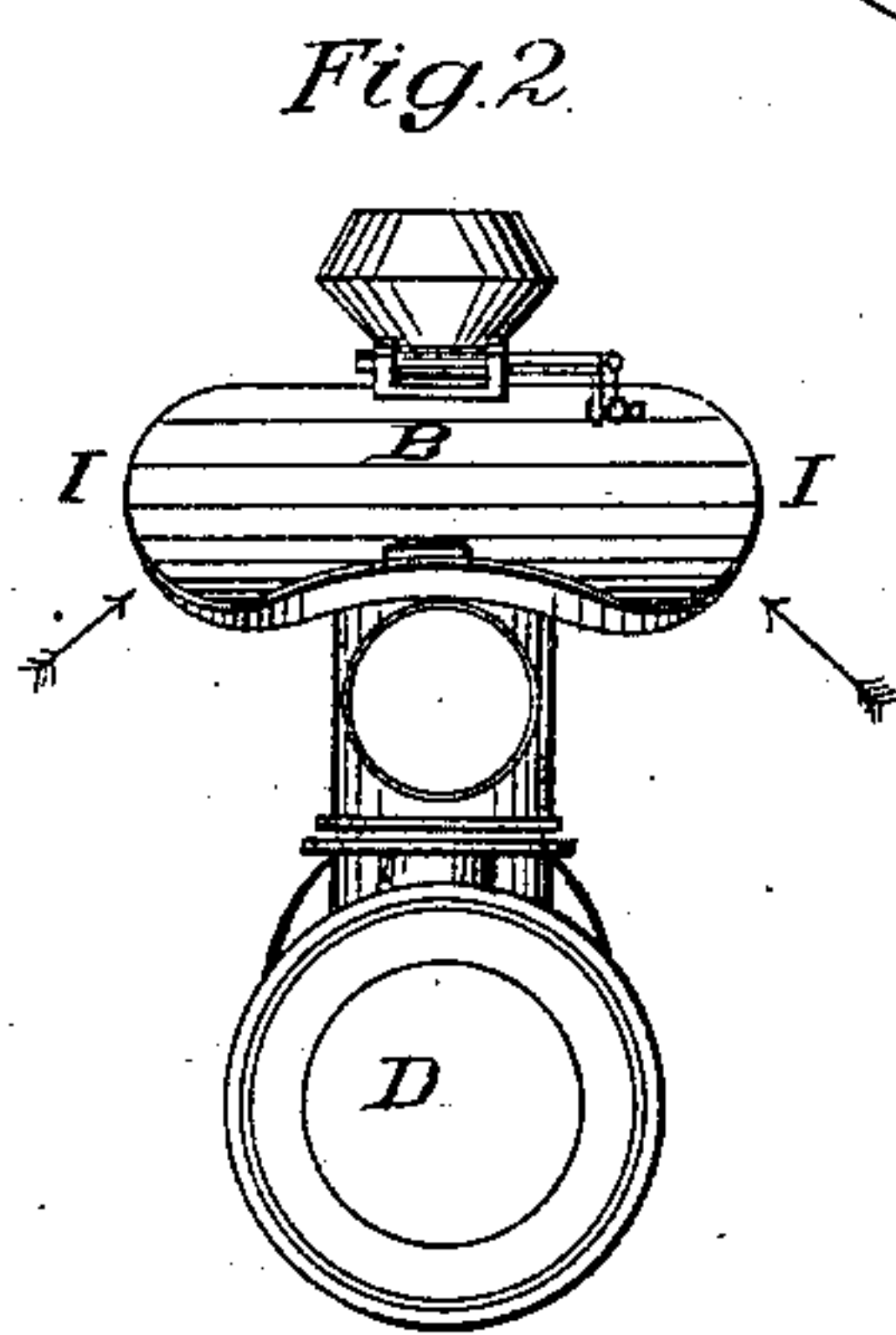
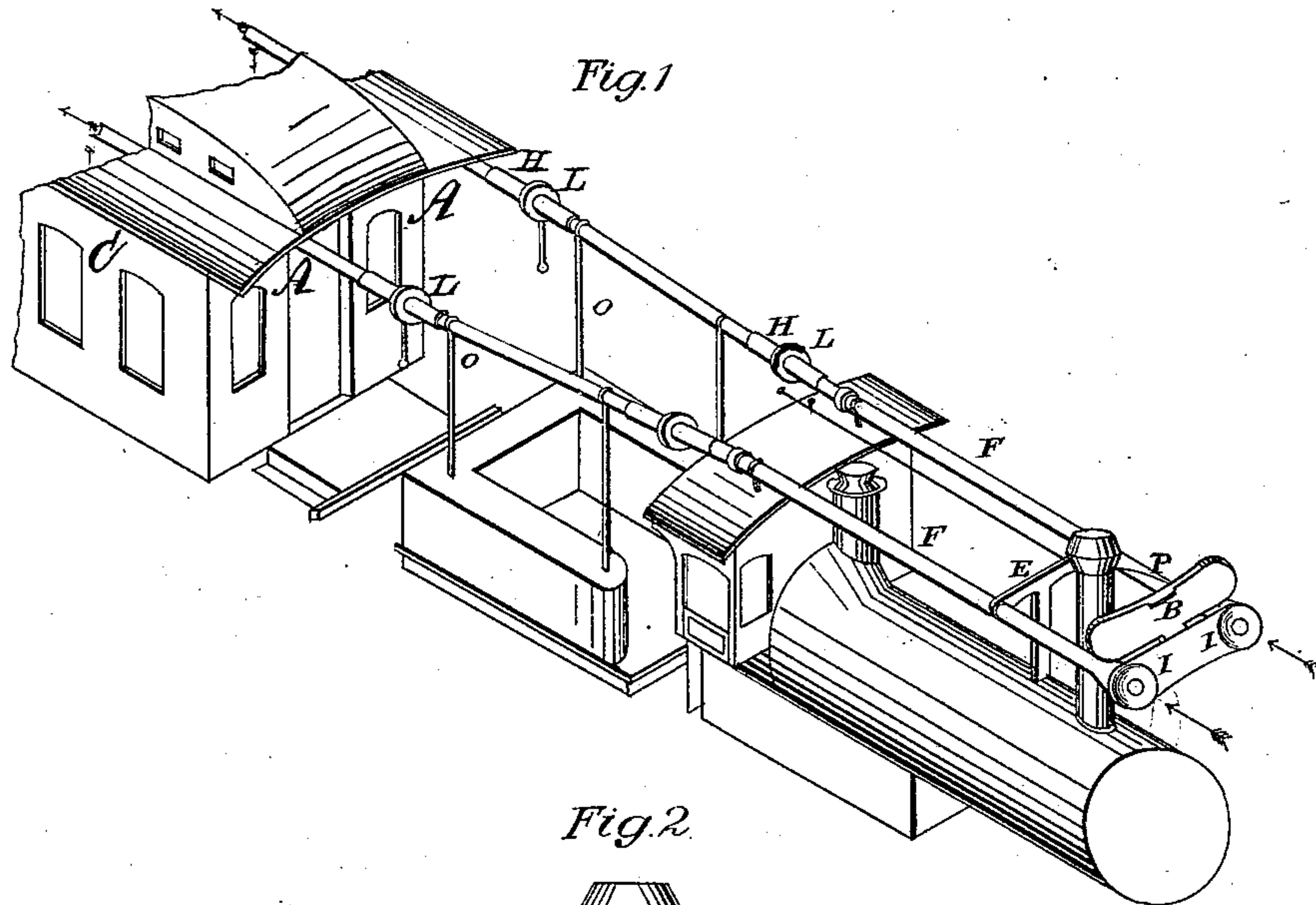


H. H. WOLFE.  
Ventilating Cars.

No. 208,132.

Patented Sept. 17, 1878.



Attest

James Ensign  
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Inventor

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# UNITED STATES PATENT OFFICE.

HENRY H. WOLFE, OF SALISBURY, CONNECTICUT.

## IMPROVEMENT IN VENTILATING CARS.

Specification forming part of Letters Patent No. **208,132**, dated September 17, 1878; application filed March 23, 1878.

*To all whom it may concern:*

Be it known that I, HENRY H. WOLFE, of Salisbury, in the county of Litchfield and State of Connecticut, have invented a new and useful Improvement in Ventilating Cars, which improvement is fully set forth in the following specification and accompanying drawing, in which—

Figure 1 is a perspective view of locomotive and car with my ventilator attached; Fig. 2, a front view of the ventilator, and Fig. 3 a section of the same.

The object of my invention is to furnish a device by which to conduct pure air, free from cinders, smoke, and dust, from in front of locomotive, by pipes running over top of locomotive and through entire train, and thus admit air into each car, as desired. The pipes are connected between cars as the train is made up.

In the drawings, D is the front of locomotive; I I, funnel ends of ventilating-pipes F F, for taking pure air from in front of locomotive, secured on and over top of locomotive and over tender of locomotive by standards E and O O.

The air enters in funnel ends I I of ventilating-pipes F F, passing through ventilating-pipes F F over top of locomotive and over top of tender of locomotive, entering end of passenger-car C at A A, and passing in and through passenger-car C or cars when attached to locomotive by L L, couplings between passenger-car C and locomotive. The ventilating-pipes F F are coupled together by L L, coupling between each passenger-car as the train is made up, forming a continuous current of air, through ventilating-pipes F F, through entire train. The air is taken from the ventilating-pipes F F inside the car C or cars by registers or valves, ventilating each passenger-car as desired with pure air, free from cinders, smoke, and dust, when the cars are in motion.

E is standard bolted on top of locomotive-boiler, for supporting ventilating-pipes F F with funnel ends I I over top of locomotive. O O are standards bolted on top of tender of locomotive, for supporting ventilating-pipes F F over top of tender of locomotive. The ventilating-pipes F F enter car C at A A.

My improvement in ventilating cars obviates

the hoisting of any of the car-windows, as it is necessary to keep the cinders, smoke, and dust from entering the cars.

Fender B is attached to funnel-ends I I of ventilating-pipes F F by hinge movement, which can be let down to prevent rain or snow from entering funnel-ends I I of ventilating-pipes F F, and still admit air into car C or cars.

P is a rod attached to fender B by joint movement, running through standard E over top of locomotive, convenient to engineer or conductor, to regulate fender B.

Short rubber-pipes H H are fastened to ventilating-pipes F F and to couplings L L, for receiving the motion of the locomotive and cars when running, and coupled together by L L, couplings between locomotive and car C or cars, as shown in Figs. 1 and 3.

I claim—

1. The ventilating-pipes F F with funnel-shaped ends I I, for taking pure air from in front of locomotive D and conducting it in passenger-car C or cars, free from cinders, smoke, and dust, ventilating each passenger-car as desired, fender B, attached to funnel ends I I of ventilating-pipes F F, having rod P connected to fender B by joint movement, couplings L L, and vibrating rubber pipes H H and standards E and O O, substantially as shown and described.

2. The combination of the ventilating-pipes F F with funnel-ends I I, for taking pure air, free from cinders, smoke, and dust, from in front of locomotive D and conducting it over top of locomotive into car C, ventilating each passenger-car as desired, fender B, attached to funnel-ends I I of ventilating-pipes F F, having rod P connected to fender B therewith by joint movement, couplings L L, rubber pipes H H, the standard E, fastened on top of locomotive-boiler, supporting ventilating-pipes F F over top of locomotive, and the standards O O for supporting ventilating-pipes F F over tender of locomotive to car C, the ventilating-pipes F F entering car C at A A, all substantially as shown and described.

HENRY H. WOLFE.

Witnesses:

JAMES ENSIGN,  
HATTIE ENSIGN.