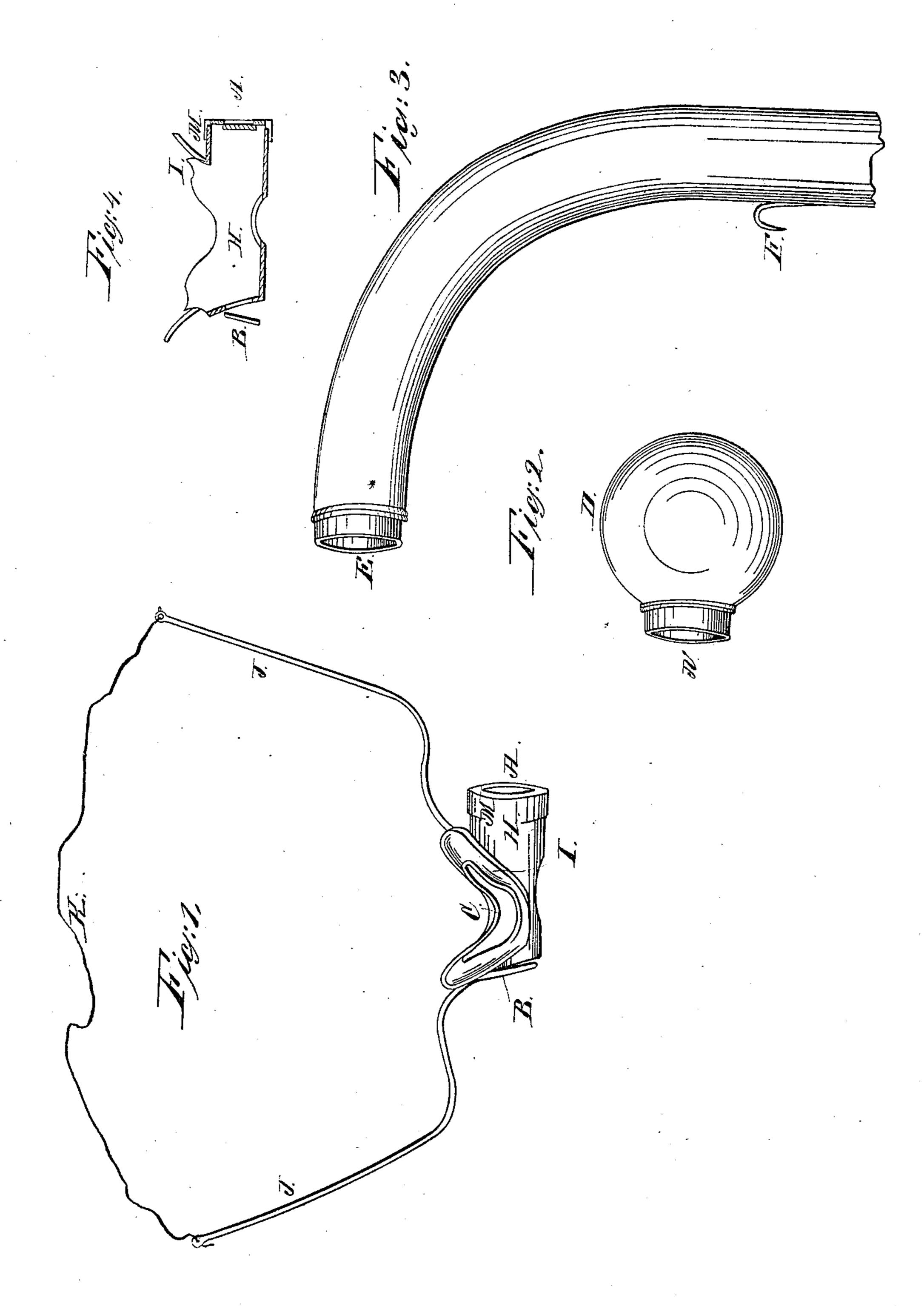
L. P. Haislett,

Lung Protector.

Nº 6,529.

Patenteal June 12, 1849.



## UNITED STATES PATENT OFFICE.

LEWIS P. HASLETT, OF LOUISVILLE, KENTUCKY.

INHALER OR LUNG-PROTECTOR.

Specification of Letters Patent No. 6,529, dated June 12, 1849.

To all whom it may concern:

Be it known that I, Lewis P. Haslett, of Louisville, in the county of Jefferson and State of Kentucky, have invented a new and 5 useful Machine for Protecting the Lungs Against the Inhalation of Injurious Substances; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the 10 same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a descriptive view of the nose joint. Fig. 2 is a descriptive view of the 15 filterer. Fig. 3 is a descriptive view of the tube and hook. Fig. 4 is a longitudinal section view of the nose joint, the same letters referring to like parts.

K is an elastic string. J J are wire guards.

I is a nose piece shaped to fit the nostrils or the mouth.

H is a chamber.

M is a movable cap made to slip on the 25 chamber in a joint or sleeve like manner.

A and B are simple clapper valves and are attached in such a manner that they will vibrate freely.

A is the inhaling valve and is attached to

30 the cap.

B is the exhaling valve and is attached to the chamber, those parts are all united forming one combination or body as represented by Figs. 1 and 4.

When the piece I is shaped or made to fit the mouth I then term the combination a mouth joint. I thus make the joint appli-

cable to either the nose or mouth.

Fig. 2 letter D is a filterer and is simply 40 an arrangement of woolen fabric or other porous substance in such manner as to form within its self a complete chamber of globular or other shape having an opening at letter N. When the elasticity of the woolen 45 fabric or other porous substance is not of sufficient strength to retain the form given to it I use a light wire frame over which I extend the woolen fabric or other porous substance.

Fig. 3 letter E is a flexible tube or hose. Letter F is a hook attached to the same.

The action mode of combining and applying the protector is as follows: The fil-

terer is first moistened with water, then attach it to the joint by slipping it on cap M. 55 The joint is then brought in conjunction with the nostrils by placing the nose piece so that its orifice C and bearing will correspond with the nostrils and rim of the nose. The string is then drawn over the head to 60 the back part, at which point the elasticity of the string secures the joint to its place. Respiration is then carried on through the nostrils and joint. Upon inhaling the air enters through the filterer, thereby becoming 65 filtered of the dusts with which it may be impregnated. The air, after having passed through the filterer, enters the chamber through the inhaling valve, and from thence proceeds to the lungs. Upon exhaling the 70 air or breath is discharged through the exhaling valve, the inhaling valve preventing its discharge through the filterer. To protect the lungs against the more volitile substances, such as gas, smoke, &c., I apply the 75 protector thus: Detach the filterer from the joint, then attach it to the lower or distant end of the tube, the other end of which is attached to the joint in place of the filterer. The tube is then extended over the shoulder 80 and down the side to within a few inches of the floor upon which the wearer may stand, or to any other point on the person (extending in no direction from the person). The tube is then secured to the dress by the sev- 85 eral hooks attached to it for that purpose. Respiration is then carried on through the tube which conducts the lower strata of atmosphere to be inhaled.

The utility of the valves consists in their 90 protecting the lungs from inhaling its own impurities. The manner in which they thus protect is by causing the exhaled breath to be discharged through the exhaling valve instead of back through the filterer, in which 95 case the impurities of the breath would become attached to the filterer, part of which impurities, upon inspiration, is carried back to the lungs, together with the amount of breath remaining in the filterer.

What I claim as my invention and desire to secure by Letters Patent is—

1. I claim the nose or mouth joint having the piece I made to fit the nostrils or the mouth in combination with the valves A and 105 B for the purpose of causing the air to enter

and be discharged through separate orifices as herein described.

2. In combination with the said nose or mouth joint and valves I claim the filterer 5 D either with or without the tube E as described.

I offer this description of my lung protector as containing the improvements on

the same as entered in the confidential archives of the Patent Office on the 26th of 10 November, 1847.

## LEWIS PHECTIC HASLETT.

Witnesses:

JOHN SCOTT, CHARLEY GORDON.