M. F. MAURY.

Improvement in Pneumatic Springs.

No. 125,749. Patented April 16, 1872.

Fig. 1.

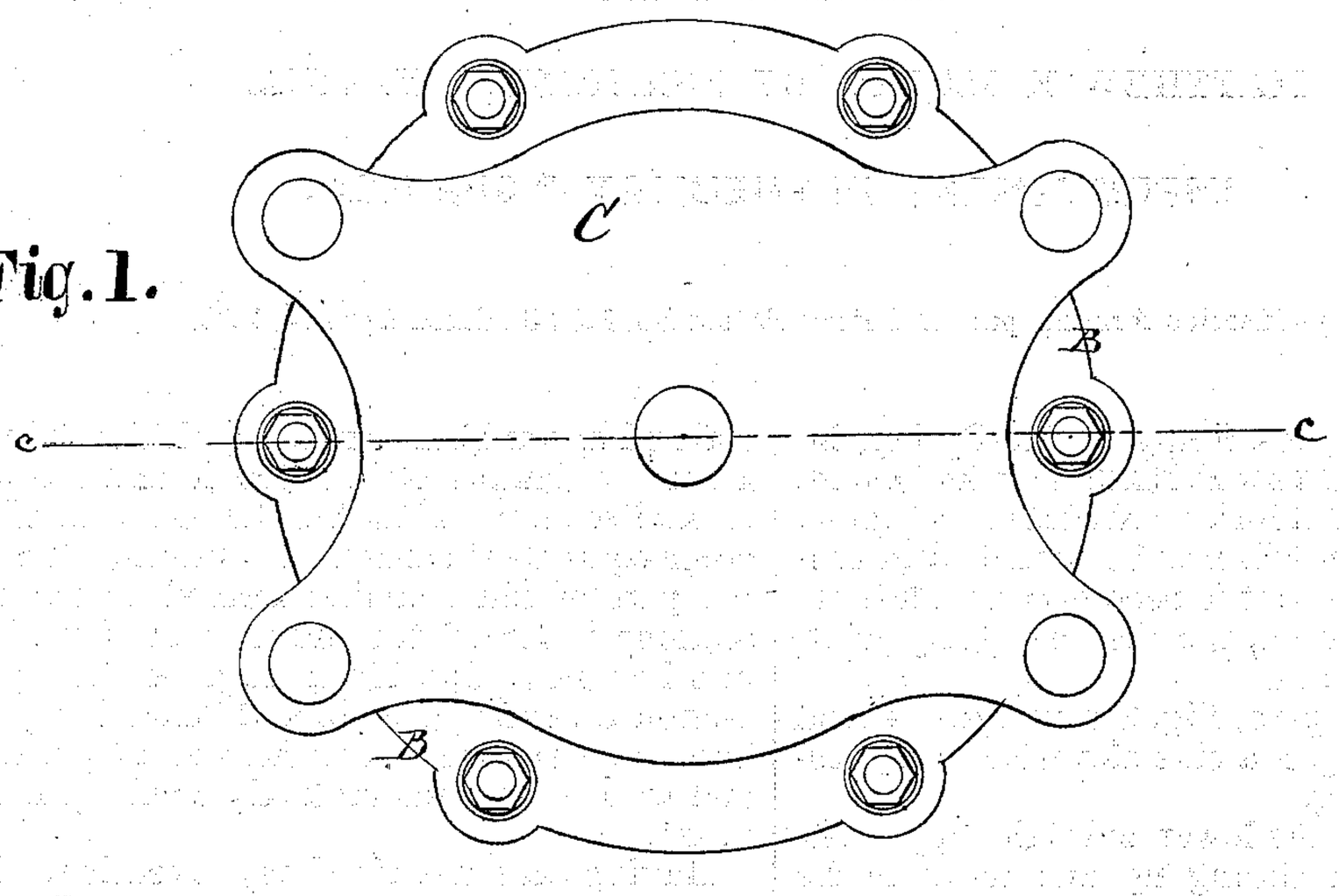


Fig. 2

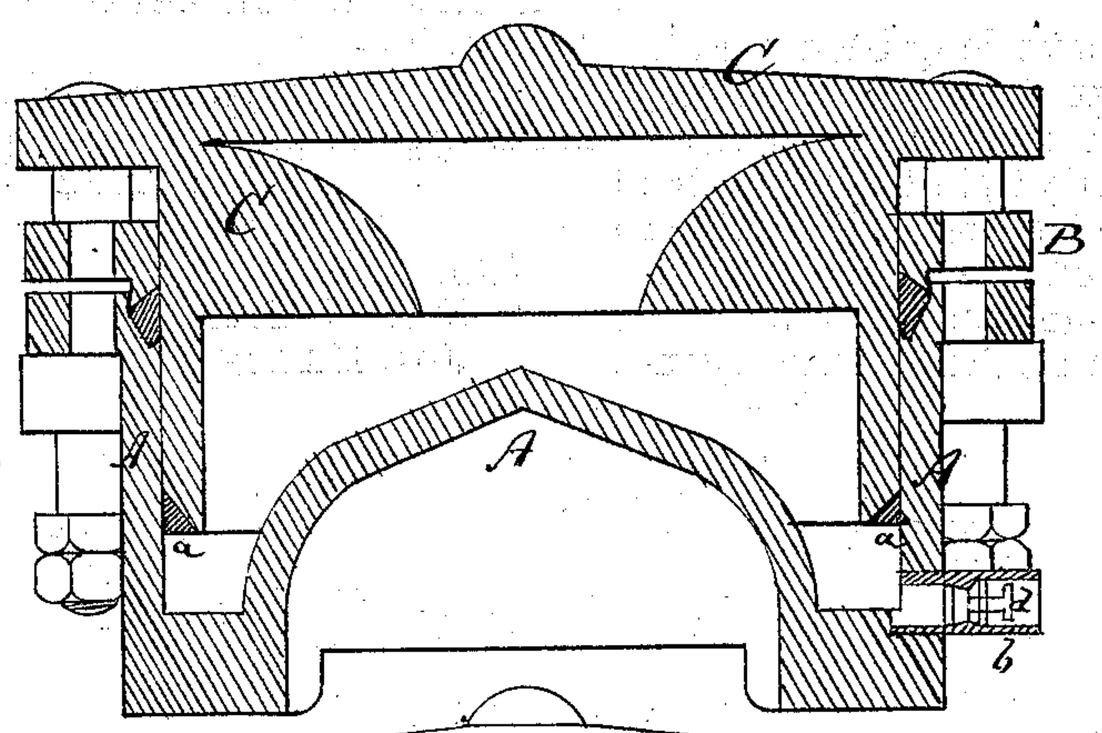
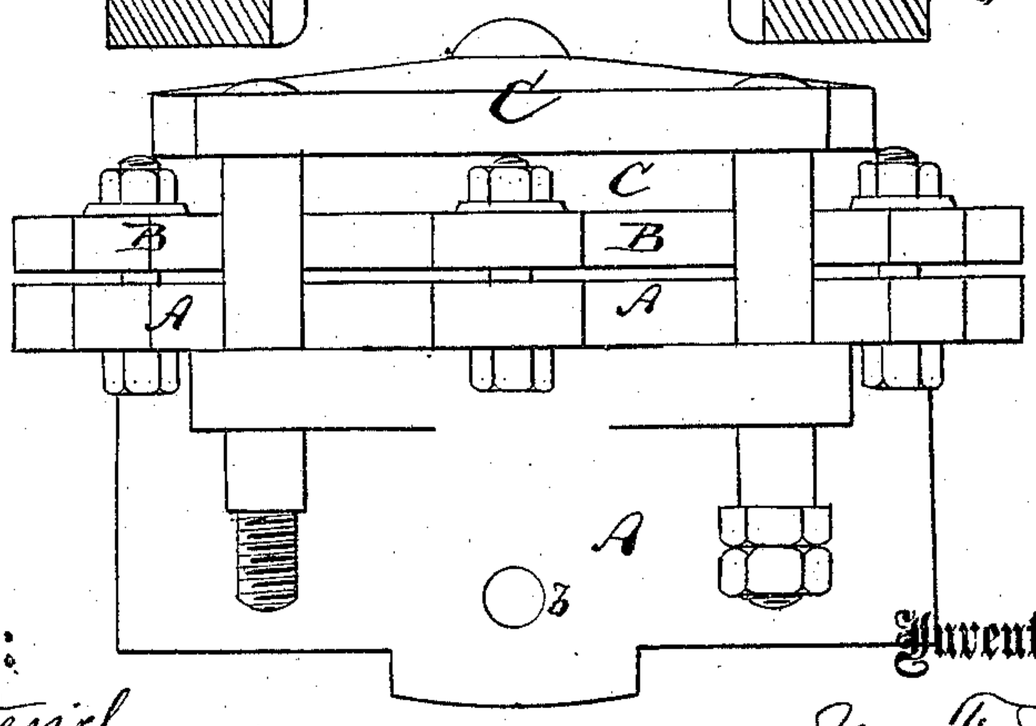


Fig. 3.



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125,749

UNITED STATES PATENT OFFICE.

MATTHEW F. MAURY, OF RICHMOND, VIRGINIA.

IMPROVEMENT IN PNEUMATIC SPRINGS.

Specification forming part of Letters Patent No. 125,749, dated April 16, 1872.

Specification describing a Car-Spring, invented by MATTHEW F. MAURY, of Richmond, in the county of Henrico and State of Virginia.

The invention will first be described in connection with all that is necessary to a full understanding thereof, and then be clearly pointed out in the claim.

Figure 1 is a plan, Fig. 2 a vertical central section, and Fig. 3 a side elevation of a pneumatic car-spring.

A represents the lower and C the upper section, the upper sliding up and down in the lower.

Pneumatic springs have long been used in machinery, but the great obstacle to their general employment has been the inability to secure a packing sufficiently tight to prevent the escape of air when under pressure. I think that I have accomplished this object in a perfect and economical manner as follows:

I construct the lower section A with a central and upward convexity, A′, which produces a narrow channel, *a*, between it and the wall of said section. I fill this channel with oil or other equivalent substance, while into the upper part of the chamber formed by the two sections is forced the proper quantity of air or other gas. The lower edge of the upper section C rests in the oil, and hence the joint between the two sections is hermetically sealed, and with but a comparatively small quantity of oil.

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

In pneumatic springs, I claim the oil-channel *a*, applied as and for the purpose set forth.

MATTHEW F. MAURY.

Witnesses:
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