No. 817,797. PATENTED APR. 17, 1906.

W. J. OGAN.

STRAINER FOR AIR COMPRESSORS.

APPLICATION FILED FEB. 1, 1906.

Fig. 1.

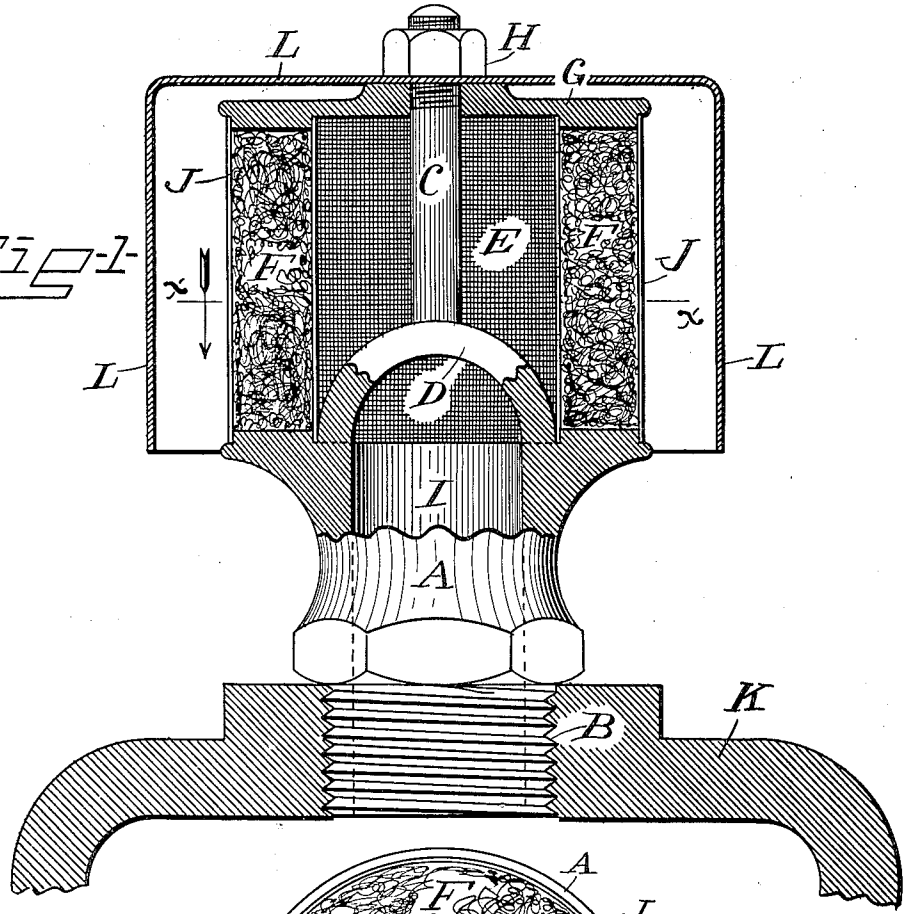
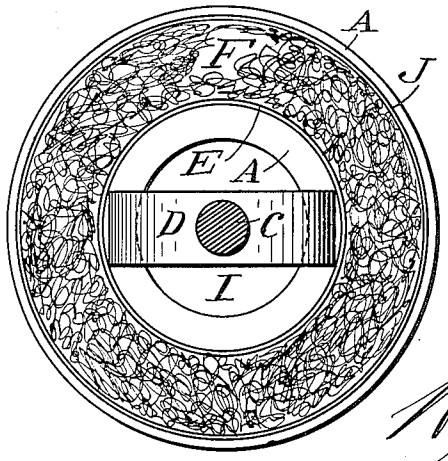


Fig. 2.



Witnesses

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STRAINER FOR AIR-COMPRESSORS.

No. 817,797. Specification of Letters Patent. Patented April 17, 1906.

Application filed February 1, 1906. Serial No. 298,908.

To all whom it may concern:

Be it known that I, WILLIAM J. OGAN, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Strainers for Air-Compressors; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to a strainer for air-compressors, and has for its object the provision of means for straining the air before it enters the cylinder of the compressor.

The object of the invention is to provide such device for relieving the incoming air from dust or other foreign substances in a most efficient manner.

Preceding a detail description of the invention reference is made to the accompanying drawings, of which—

Figure 1 is a vertical sectional elevation of my improved air-compressor. Fig. 2 is a top plan view with the cap removed on the line *x x* of Fig. 1.

In a detail description of the invention similar reference characters indicate corresponding parts.

The device comprises a base portion A with screw-threaded stem B, by means of which the device is connected to an air-chest K or other portion, from which the air is taken to the cylinder of the compressor, which is not shown. I designates the passage leading through said base portion and through which the filtered air is conducted. The base A has a yoke D, spanning the upper terminal of the passage I. From this yoke there is projected an integral stem C, extending from the central portion of the yoke and through the middle portion of the strainer.

Mounted upon the base A are two cylinders E and J, constructed of a suitable mesh of wire and comprising inner and outer strainers, which provide an intervening chamber F. This chamber F is filled with hair or any other equivalent material in a well-known manner to filter or separate foreign substances from the air as the latter enters the strainer and passes to the passage I. The inner gauze or wire cylinder E is centered and held in such position by the base-yoke D, and both cylinders are tightly inclosed between the base A and a cap G, said cap resting on the upper edges of said cylinders and having a central aperture through which the stem C passes. The top of the stem is fitted with a nut H, which is tightened against the cap G. This cap also forms the upper inclosure of the hair-chamber F.

From the foregoing description it will be readily seen that a most efficient means is provided for filtering the air or separating all particles of matter therefrom.

The device is susceptible of being attached either directly to the pump or compressor-cylinder, or it may be connected to an intervening pipe. The device may be quickly opened by removing the cap G when necessary to replace the filtering medium in the chamber F by a new supply.

L designates a shield or cup inclosing the strainer and preventing snow or rain from interfering with the effectiveness of the same. This shield or cup is secured at the top of the strainer by the nut H, and the sides thereof extend down around the sides of the strainer.

Having described my invention, I claim—

A strainer for air-compressors, comprising a screw-threaded apertured base A with yoke D extending from its upper side and spanning the aperture, concentrically-disposed screen-cylinders E and J mounted upon said base portion and inclosed at their upper ends by a cap G, a stem C projected from the yoke D and penetrating a central aperture in the cap, said stem being provided with a nut which tightens the cap against the screen-cylinders, said screen-cylinders providing a chamber concentric therewith and lying on the outer side of the aperture in the base, a filtering medium inclosed within said chamber, and a shield inclosing said strainer and held in position by the nut which tightens the cap against the screen-cylinders.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM J. OGAN.

Witnesses:

J. MATTHEW SEIBLER,

R. J. MCCARTY.