April 12, 1932. G. J. MacFADDEN 1,853,368

AIR COMPRESSOR

Filed Sept. 20, 1929

Fig. 1.

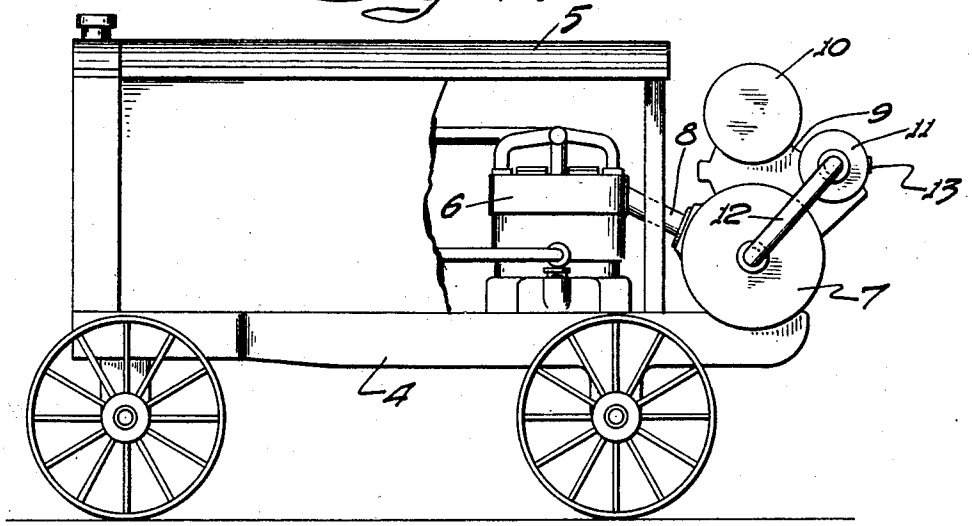


Fig. 2

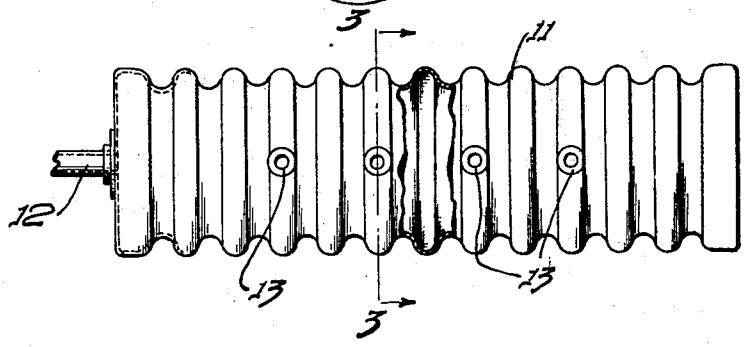
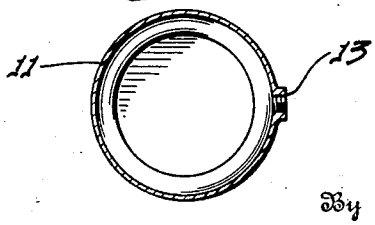


Fig. 3.



Inventor

G. J. MacFadden

By

Attorney

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UNITED STATES PATENT OFFICE

GEORGE J. MacFADDEN, OF QUINCY, ILLINOIS, ASSIGNOR TO GARDNER-DENVER COMPANY, OF DENVER, COLORADO, A CORPORATION OF DELAWARE

AIR COMPRESSOR

Application filed September 20, 1929. Serial No. 394,116.

This invention relates to air or gas compressors, more particularly of the portable type. The object is to provide means for securing a more effective cooling of the air prior to its passage to the tools operated thereby.

The preferred embodiment of the invention is illustrated in the accompanying drawings, wherein:

Figure 1 is a side view of a standard type of portable compressor showing the improvement in place thereon.

Figure 2 is a view in elevation and partly in section of the combination cooler and manifold.

Figure 3 is a cross sectional 3—3 of Figure 2.

In the embodiment disclosed a wheeled support or frame 4 is employed on which is a housing or casing 5 containing the usual air compressing mechanism. The compressor is shown at 6 and may be of any well known character. The frame 4 extends at one end beyond the casing 5 and supports a reservoir or container 7 for the air compressed by the compressor 6. A suitable pipe 8 therefore connects the compressor 6 and reservoir 7.

On the compressor reservoir 7, which is ordinarily a transversely arranged tank, is located a suitable support 9 which carries the gasoline tank 10 that supplies motive fluid to the engine of the compressor. This support 9 is extended and provided with a seat for a combined cooler and manifold. As shown particularly in Figures 2 and 3 the cooler or manifold is of tubular form with cylindrical side walls that are corrugated as shown at 11. A connection 12 at one end is in communication with one end of the reservoir 7 and thus air is supplied to the manifold. Said manifold is furthermore provided with a plurality of outlet nipples 13 that are internally threaded or otherwise formed to permit the attachment thereto of hose lines leading to the tools to be operated on.

With this construction the air in the reservoir 7 even though it has been pre-cooled, is further cooled when it is transmitted from the reservoir to the tools inasmuch as it must pass through the manifold, the corrugations of which constitute means for radiating the heat of the air passing therethrough.

What I claim, is:

1. The combination with a supporting frame, of a compressor mounted thereon, a reservoir for the compressed air mounted transversely on one end of the frame, a manifold body of tubular form mounted on the reservoir and having heat-radiating means, said body having communication with the reservoir, and means for attaching a plurality of hose lines to the body.

2. The combination with a support, of a compressor and a reservoir for the compressed air mounted on the support, means for supplying the compressed air in a reservoir to a tool, said means including an air cooled manifold through which the air passes to the tool, said manifold being mounted on the support and having connections with the reservoir to receive air therefrom, and said manifold having means for connecting a plurality of tool supply conduits thereto.

3. The combination with a support, of a compressor and a reservoir for the compressed air mounted on the support, means for supplying the compressed air in the reservoir to a tool, said means including an air cooled manifold through which the air passes to the tool, said manifold being mounted on the support and having connections with the reservoir to receive air therefrom, said manifold having heat dissipating means, and said manifold having means for connecting a plurality of tool supply conduits thereto.

4. The combination with a support, of a compressor and a reservoir for the compressed air mounted on the support, means for supplying the compressed air in the reservoir to a tool, said means including an air cooled manifold through which the air passes to the tool, said manifold being mounted on supports resting upon said reservoir and having connections with the latter to receive air therefrom, and said manifold having means for connecting a plurality of tool supply conduits thereto.

5. The combination with a support, of a compressor and a reservoir for the com-

pressed air mounted on the support, and extending transversely thereof, means for supplying the compressed air in the reservoir to a tool, said means including an air cooled manifold through which the air passes to the tool, said manifold being supported upon the reservoir and having connections with the latter to receive air therefrom, said manifold having heat dissipating means, and said manifold having means for connecting a plurality of tool supply conduits thereto.

6. The combination with a support, of a compressor and an air receiver therefor mounted on the support, means for supplying air from the receiver to a tool, said means including an air cooled manifold mounted horizontally upon the receiver, and said manifold having means for connecting thereto a supply conduit leading to a tool.

In testimony whereof I affix my signature.

GEORGE J. MacFADDEN.