

Aug. 26, 1924.

1,506,601

J. E. NELSON

MIXING DEVICE

Filed Feb. 25, 1922

*Fig. 1.*

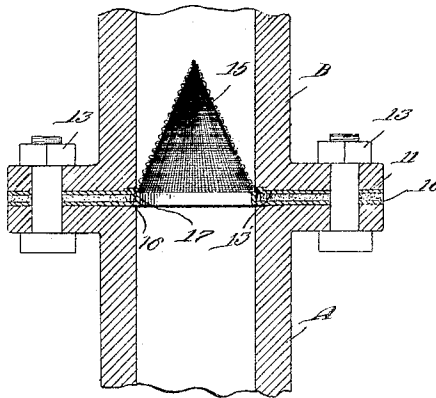


*Fig. 2.*

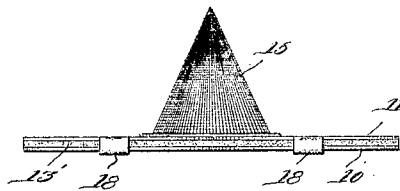


*Fig. 3.*

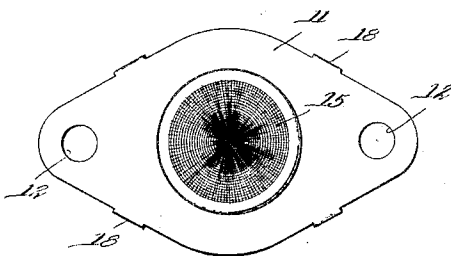
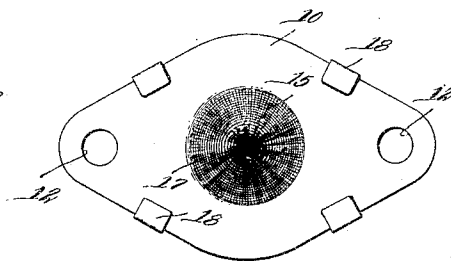


*Fig. 4.*



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## UNITED STATES PATENT OFFICE.

JOHN ENAR NELSON, OF BUCYRUS, NORTH DAKOTA.

## MIXING DEVICE.

Application filed February 25, 1922. Serial No. 539,197.

*To all whom it may concern:*

Be it known that I, JOHN E. NELSON, a citizen of the United States, residing at Bucyrus, in the county of Adams and State of North Dakota, have invented new and useful Improvements in Mixing Devices, of which the following is a specification.

This invention comprehends the provision of a new article of manufacture, in the nature of a combined gasket and vaporizer adapted for use with internal combustion engines, and designed to be arranged between the carburetor and the intake manifold, for the purpose of more thoroughly vaporizing the fuel prior to its introduction to the engine, with a consequent increase of power and a resultant saving of fuel.

The nature and advantages of the invention will be better understood when the following detailed description is read in connection with the accompanying drawing, the invention residing in the construction, combination, and arrangement of parts as claimed.

In the drawing forming part of this application, like numerals of reference indicate similar parts in the several views, and wherein:—

Figure 1 is a sectional view through the device showing it arranged between the carburetor and intake manifold of an engine.

Figure 2 is a perspective view of the device.

Figure 3 is a detail view of one section of the gasket partly in section.

Figure 4 is a perspective view of the other section of the gasket.

Referring to the drawing in detail, A indicates a carburetor, and B the intake manifold of an internal combustion engine, between which parts the device forming the subject matter of the present invention is arranged, as clearly illustrated in Figure 1. This device includes a gasket made up of two sections of similar contour, the sections being indicated at 10 and 11 respectively, and openings 12 being provided to accommodate the fastening elements 13 which are utilized in holding the carburetor and the intake manifold associated. Interposed between the sections 10 and 11 is a piece of asbestos or the like 13. Each section of

the gasket is provided with an enlarged central opening from which projects a substantially conical shaped member 15 which is constructed of foraminated material. This member 15 is secured to one side of the section 10 about the openings therein, and projects through the corresponding opening of the section 11. As illustrated in Figure 1, the member 15 extends into the intake manifold when the device is in position for use. The section 10 is formed with an upstanding circumferential collar 16, to which the lower end of the foraminated member 15 is soldered or otherwise secured. The asbestos strip or piece of material is also provided with a central opening through which the member 15 passes. The section 11 of the gasket is formed with a plurality of bendable tongues 18 which are adapted to bend over the edges of the gasket and repose against the section 11 thereof to hold said sections together. The device in its entirety is very simple in construction and can be manufactured and sold at a very nominal cost. It can also be very easily and conveniently arranged between the carburetor and intake manifold in a manner shown in Figure 1, and when in position for use tends to more thoroughly vaporize the fuel prior to its introduction into the cylinders of the engine for the purpose stated.

While it is believed that from the foregoing description, the nature and advantages of the invention will be readily apparent, I desire to have it understood that I do not limit myself to what is herein shown and described, and that such changes may be resorted to when desired as fall within the scope of what is claimed.

What I claim is:

A mixing device of the character described comprising a pair of spaced associated plates provided with aligned openings, a flange rising from the edge of the opening of one of said plates, a conical shaped foraminated member rising from the marginal edge of the opening of the other of said plates and said flange being bent upon the edge of said member as and for the purpose specified.

In testimony whereof I affix my signature.  
JOHN ENAR NELSON.