Nov. 24, 1936. J. NEWMAN 2,062,141

MUFFLER

Filed July 17, 1935

Fig. 1.

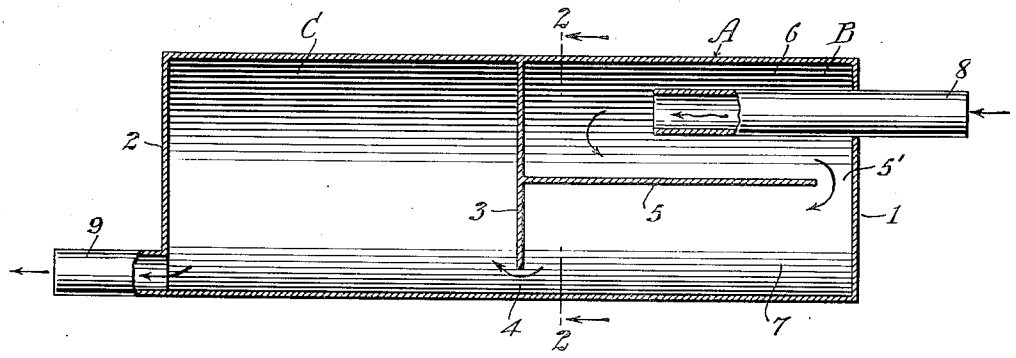


Fig. 2

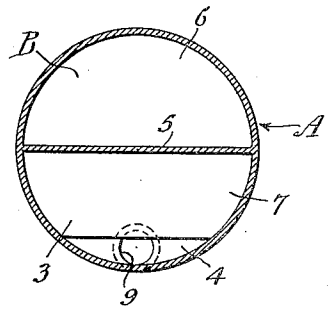
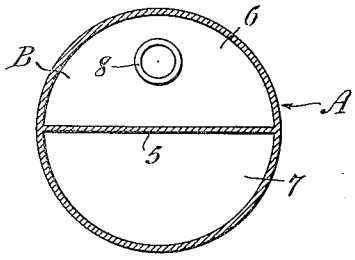


Fig. 3.



WITNESSES

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MUFFLER

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2 Claims. (Cl. 181—57)

This invention relates to mufflers, and more specifically to mufflers designed for operative attachment to the exhaust of internal combustion engines.

An object of the invention is to provide a muffler of this character which will catch and retard any solids escaping from the exhaust, which will prevent back firing, which reduces noise to an absolute minimum, and which performs all the functions attributable to a muffler of this character.

With these and other objects in view, the invention consists in certain novel features of construction and combinations and arrangements of parts, all of which will be more fully hereinafter described and pointed out in the claims.

In the accompanying drawing—

Figure 1 is a view in longitudinal section through my improved muffler;

Figure 2 is a view in transverse section on the line 2, 2 of Figure 1 looking in the direction of the arrows;

Figure 3 is a similar view in transverse section on the same section line, but looking in the opposite direction.

My improved muffler includes a casing A which is preferably horizontally positioned and of general cylindrical shape having closed ends 1 and 2 and a partition wall 3 extending downwardly in the intermediate portion of the casing to a point adjacent the lower portion of the casing, leaving a passage 4 connecting the two chambers formed by the partition. The chamber B at the entrance end of the casing constitutes an entrance chamber and the chamber C at the rear end of the casing constitutes an exhaust chamber. The entrance chamber B is divided by a horizontal partition 5 which extends from the partition 3 to a point adjacent the end wall 1 leaving a passage 5' connecting the upper compartment 6 with the lower compartment 7 of the entrance chamber. An entrance tube 8 adapted to be operatively connected to the exhaust of an internal combustion engine extends through the end wall 1 into the upper compartment 6 of the entrance chamber B and extends to a point sufficiently near the partition 3 so as to cause the fluid entering the tube 8 to abut or impinge against partition 3 and be deflected downwardly and any solids will lodge upon the wall 5. This wall 5 is shown as being flat but it may be of any shape desired. An outlet tube 9 communicates with the lower portion of the casing and is fixed to the end wall 2. In operation, the exhaust gases from the engine pass through the tube 8, thence around and through the passage 5' into the lower compartment 7, thence through the passage 4 into the exhaust chamber C, and thence escape through the tube 9.

While I have illustrated and described what I believe to be a preferred embodiment of my invention, it is obvious that various changes might be made in the general form and arrangement of parts without departing from my invention, and hence I do not limit myself to the precise details set forth but consider myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of the appended claims.

I claim:

1. A muffler, including an elongated casing closed at its ends, a vertical partition at the center of the casing dividing the same into an entrance chamber at one end and an exhaust chamber at the other end, said partition having an opening or passage therethrough at the bottom of the casing, a horizontal partition wall extending from the vertical partition wall to a point near the entrance end of the casing and dividing the entrance chamber into upper and lower compartments, and an entrance tube communicating with the upper compartment of the entrance chamber, said exhaust chamber having an outlet in the lower portion of its closed end.

2. A muffler, including an elongated casing closed at its ends, a vertical partition at the center of the casing dividing the same into an entrance chamber at one end and an exhaust chamber at the other end, said partition having an opening or passage therethrough at the bottom of the casing, a horizontal partition wall extending from the vertical partition wall to a point near the entrance end of the casing and dividing the entrance chamber into upper and lower compartments, and an entrance tube communicating with the upper compartment of the entrance chamber, said exhaust chamber having an outlet in the lower portion of its closed end, said entrance tube extending through the closed entrance end and terminating at a point removed from the vertical partition wall.

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