

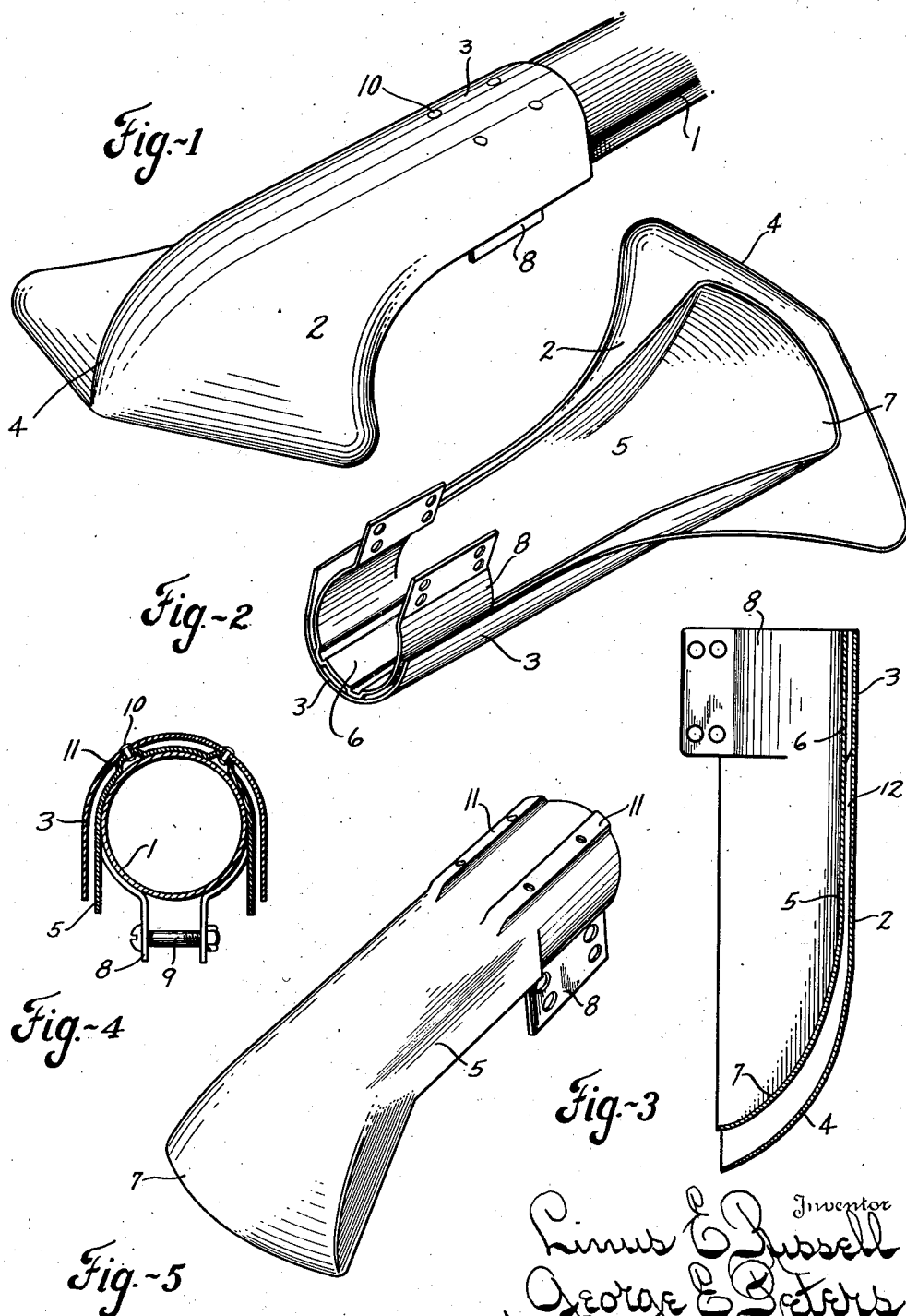
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EXHAUST PIPE EXTENSION

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EXHAUST PIPE EXTENSION

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2 Claims. (Cl. 138—46.5)

This invention pertains to exhaust pipe extensions for motor vehicles, and more particularly to means for protecting the exterior finish thereof against the deleterious effect of heat and corrosive action of spent gases.

Although exhaust pipe extensions are primarily utilitarian in character and perform a useful function in diverting products of combustion downwardly and away from the vehicle chassis and rear bumper, they are ordinarily of somewhat ornate character and of fanciful shapes and designs having chromium or other plated and highly polished exterior finish.

The intense heat of spent gases discharged through the exhaust pipe tends to overheat the deflector or exhaust pipe extension, causing deterioration and darkening of the surface finish. The corrosive action of such gases attacks the plating, causing pitting and exposure of the underlying metal, which subsequently rusts, destroying the finish and ornamental appearance.

The exhaust pipe deflector or extension forming the subject matter hereof, which may be of any desired shape or design and ornamental character, is adapted to enable rapid dissipation of discharged gases, and is so constructed and ventilated as to protect the surface finish and minimize the heat and corrosive action thereof to which it is subjected.

The object of the invention is to improve the construction of exhaust deflectors whereby they may not only be economically manufactured, but will be efficient in use, of increased durability, amply protected from the heated products of combustion and the corrosive action thereof.

A further object of the invention is to provide a ventilated deflector wherein circulation of air is enabled throughout substantially the full extent of the deflector.

A further object of the invention is to provide a lined deflector, the lining of which will protect the exterior finish of the device.

A further object of the invention is to provide a supplemental deflector by which the injurious products of combustion are diverted away from the main or exposed body thereof.

A further object of the invention is to provide an exhaust pipe extension having the advantageous structural features and meritorious characteristics herein mentioned.

With the above primary and other incidental objects in view as will more fully appear in the specification, the invention intended to be protected by Letters Patent consists of the features of construction, the parts and combinations

thereof, and the mode of operation, or their equivalents, as hereinafter described or illustrated in the accompanying drawing.

In the accompanying drawing, wherein is shown the preferred but obviously not necessarily the only form of embodiment of the invention, Fig. 1 is a perspective view of an exhaust pipe extension or deflector for products of combustion, to which the present invention is applied.

Fig. 2 is a perspective view thereof in inverted position.

Fig. 3 is a longitudinal sectional view of the assembled deflector.

Fig. 4 is a transverse section thereof.

Fig. 5 is a perspective view of the liner or inner deflector member removed from the assembly.

Like parts are indicated by similar characters of reference throughout the several views.

In the drawing, 1 indicates a portion of a vehicle exhaust pipe on which is mounted the deflector 2 embodying the subject matter hereof. This deflector is of dual construction, and comprises inner and outer shells or units. The outer or enclosing shell, which alone is normally visible, comprises a neck portion 3 of inverted channel shape, positionable about the extremity of the exhaust pipe to which it is securely attached. Beyond the end of the pipe 1 the deflector body is broadened into a flaring head 4, the margins of which are downwardly turned. The outer member is plated or otherwise attractively finished and ornamented as may be desired. It is to be understood that the form or design of the deflector may be widely varied into sundry fanciful shapes, certain of which are shown in Design Patent No. D-104,476 and in copending application Serial No. D-78,798, to which reference is made. The shape of the present deflector unit is for illustrative purpose only and is not intended to limit the scope or application of the present invention.

Enclosed within the outer shell 2, which is primarily for appearance and finish, is a primary deflector member or liner 5. This inner deflector or liner comprises a channel shaped neck portion 6 of somewhat less size than the neck 3 of the outer shell, but of parallel shape. Beyond the end of the exhaust pipe this inner deflector 5 is also broadened into an enlarged downwardly opening flaring head 7. The head 7, however, is not so large as that of the outer member from which it is spaced on all sides with its margin extending somewhat below that of the portion 4 of the outer member as shown in Fig. 3. The in-

ner member 5 is provided with dependent straps or ears 8 of sufficient length to be connected together by a bolt 9 beneath the exhaust pipe in clamping engagement therewith. The inner and outer deflector members 2 and 5 are interconnected in axially concentric spaced relation by rivets 10. The inner member 5 is preferably formed with perforate bosses or corrugations 11 at spaced intervals upon the neck 6 thereof which contact the inside of the neck 3 of the outer member and serve to space the members one from the other. Such relation provides an intervening air space 12 between the inner and outer members 2 and 5 through which air freely circulates and dissipates the heat generated by the products of combustion being discharged through the exhaust pipe. The inner member 5 only comes in direct contact with the discharged gases. It thus protects the outer shell 2 from the effects thereof.

From the above description it will be apparent that there is thus provided a device of the character described possessing the particular features of advantage before enumerated as desirable, but which obviously is susceptible of modification in its form, proportions, detail construction and arrangement of parts without departing from the principle involved or sacrificing any of its advantages.

While, in order to comply with the statute, the invention has been described in language more or less specific as to structural features, it is to be understood that the invention is not limited to the specific features shown, but that the means and construction herein disclosed comprise the preferred form of several modes of putting the

invention into effect, and the invention is therefore claimed in any of its forms or modifications within the legitimate and valid scope of the appended claims.

5 Having thus described our invention, we claim:

1. An exhaust pipe deflector, comprising two flaring shells having downturned marginal portions disposed one within the other in axially concentric relation, at least one of which includes a neck portion positionable about the terminal portion of an exhaust pipe, the respective shells both being open on their undersides and closed at their terminal ends, including a terminal marginal portion of the inner shell extending below the corresponding terminal marginal portion of the outer shell and means for conjointly connecting the dual shell structure to a vehicle exhaust pipe.

2. An exhaust deflector of the type wherein a neck portion is positionable about the terminal portion of a vehicle exhaust pipe with a flaring head portion having downturned margins extending in overhanging relation therebeyond, characterized by a baffle located within said flaring head portion including a relatively spaced downturned marginal portion terminating in spaced relation below the margin of said flaring head in a plane substantially parallel with the axis of the exhaust pipe, said baffle being so constructed and arranged as to protect the deflector from injurious effects of discharged products of combustion.

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