

No. 795,556.

PATENTED JULY 25, 1905.

I. F. SMITH.
VEHICLE HEATER.
APPLICATION FILED JUNE 24, 1903.

Fig. 1.

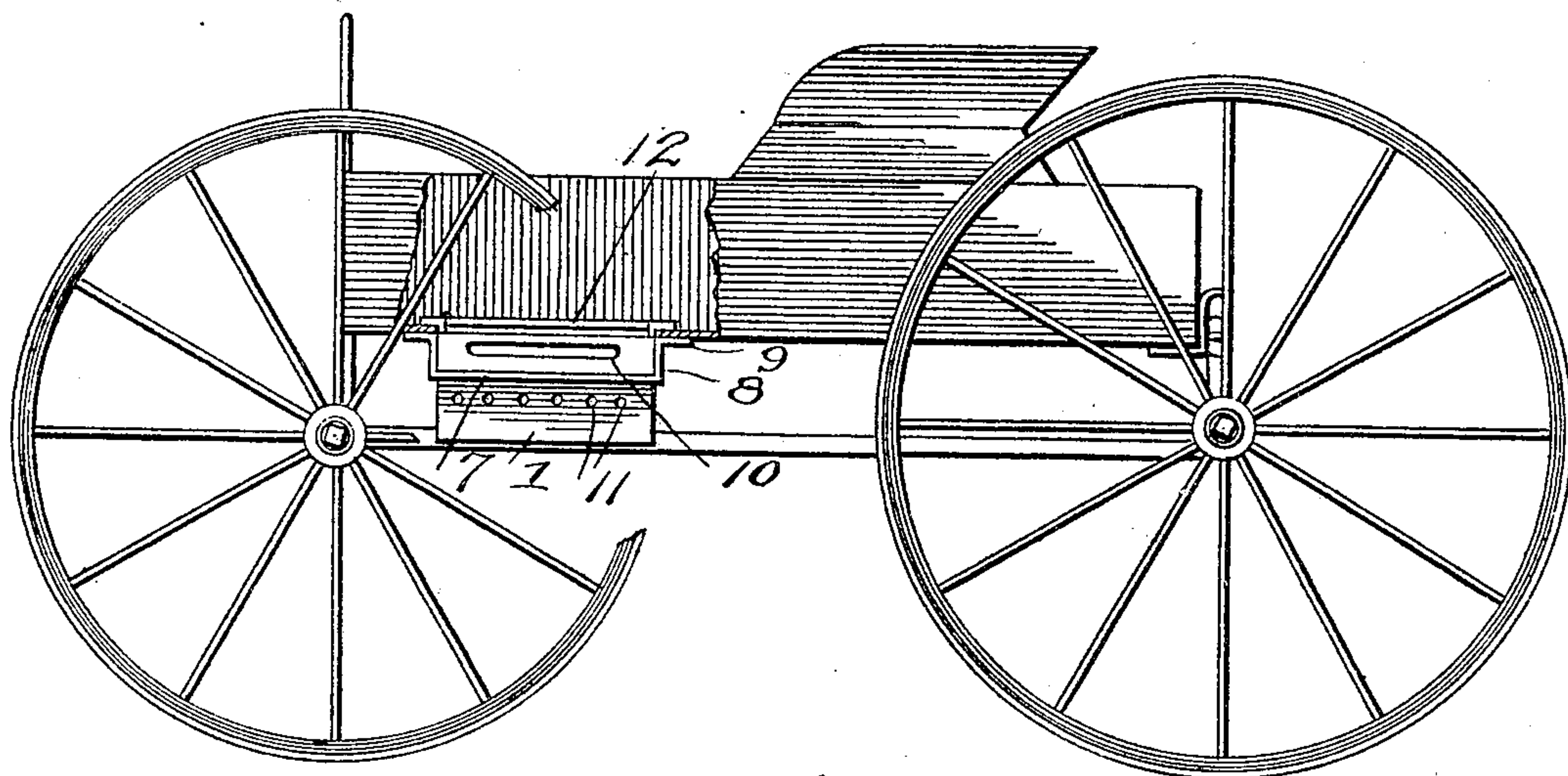


Fig. 2.

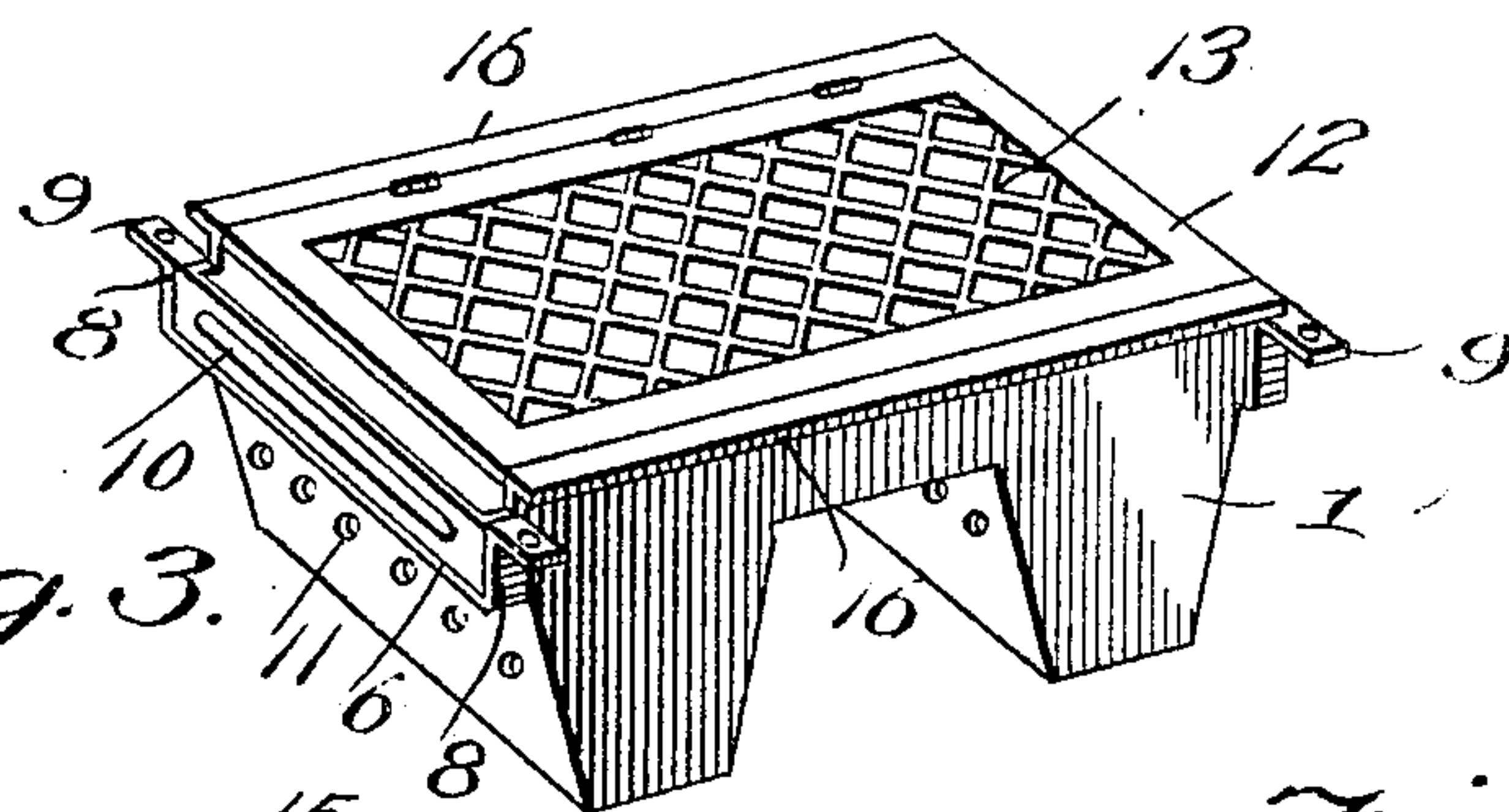


Fig. 3.

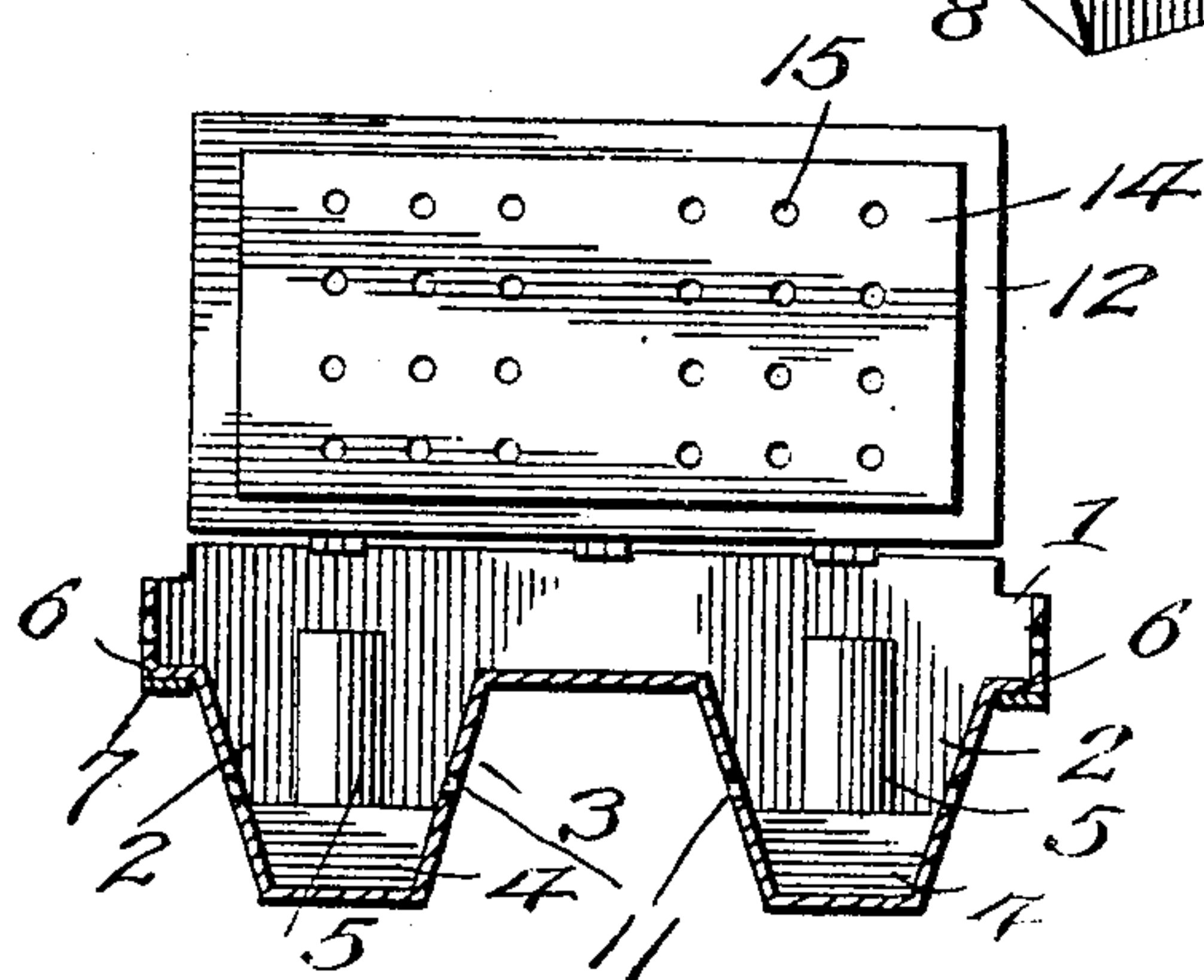
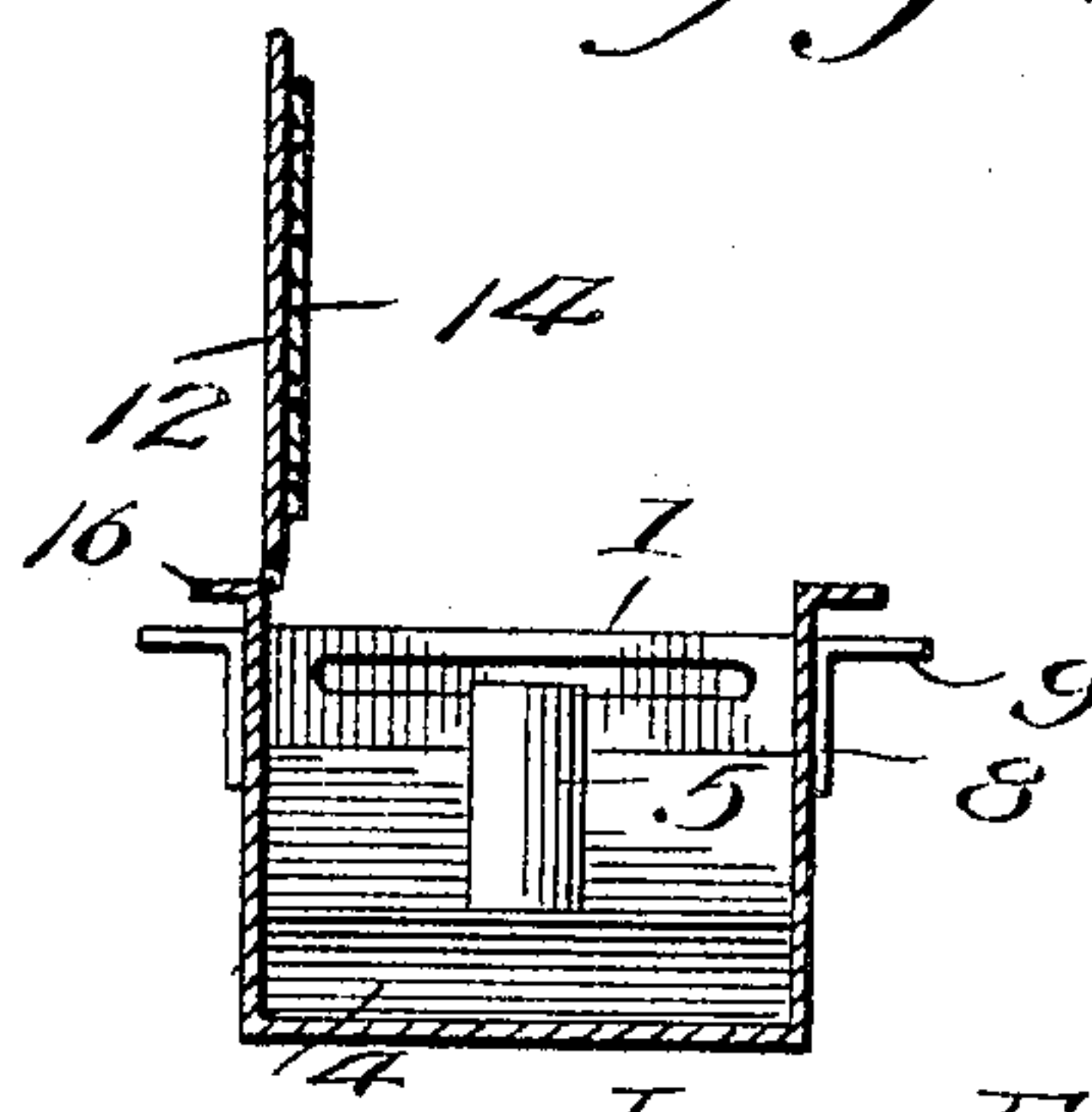


Fig. 4.



Witnesses

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VEHICLE-HEATER.

No. 795,556.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ISAAC F. SMITH, a citizen of the United States, residing at Selby, in the county of Walworth and State of South Dakota, have invented new and useful Improvements in Vehicle-Heaters, of which the following is a specification.

This invention relates to vehicle-heaters.

The objects of the invention are to improve and simplify the means for holding the heater in position upon the vehicle.

With the foregoing and other minor objects in view, which will appear as the description proceeds, the invention consists in the exact details of construction hereinafter described and claimed as a practical embodiment thereof.

In the drawings, Figure 1 is a side elevation of a vehicle, shown partially broken away and having the improved heater applied thereto. Fig. 2 is a perspective view of the heater. Fig. 3 is a longitudinal vertical section of the same with the lid or cover raised. Fig. 4 is a transverse vertical section through one extremity of the heater.

Similar numerals of reference are employed to indicate corresponding parts in the several views.

The numeral 1 designates a casing preferably formed of light sheet metal and of comparatively shallow depth. The casing is constructed with two end chambers 2, through the medium of a central arch 3 formed in the bottom, the sides of the arch and outer end of the chambers converging toward each other at an angle of inclination to reduce the chambers at the bottom, and therein are disposed oil receptacles or reservoirs 4 of a shape corresponding to the lower portion of the chambers and having burners 5 of any approved form. At opposite ends the casing is formed with offsets or shoulders 6, and thereunder in close engagement therewith hanger-straps 7 are secured and have angular extremities 8, with horizontally-disposed apertured terminals 9. The ends of the casing have upper elongated draft-openings 10 and lower draft-apertures 11, the latter being close to the burners and formed in the inner and outer walls of the chambers. The draft openings 10 and apertures 11 permit air to enter the interior of the heater at different elevations to assist in the combustion of the fuel, which will be preferably hydrocarbon oil, fed to the burners by wicks, as in ordinary lamp constructions. The heater is also provided with a hinged lid or cover 12, which is grated, as at

13, similar to a register-face or cover-plate. Close to the lower side of the lid or cover a sheet-metal plate or guard 14 is secured and has a plurality of openings 15 therein. This lid or cover 12 is hinged to what may be termed the "back" of the heater and may be readily opened to gain access to the interior of the heater. The plate or guard 14 prevents the flame from the burners passing up through the lid or cover and protects the garments of the occupants of the vehicle in proximity to the said lid or cover without materially detracting from the upward flow of the heat-currents into the body of the vehicle.

The upper terminals of the opposite sides of the heater are formed with outstanding horizontal flanges 16 to assist in the positive securement of the heater to a vehicle-body. In applying the heater to a vehicle a suitable opening is cut in the bottom of the body of the latter and the upper portion of the heater is turned or tilted slightly to insert the flanges 16 through the opening, or the said flanges may be slightly straightened and afterward bent down over the bottom of the vehicle-body close to the opening, as shown by Fig. 1. The angular extremities 8 of the hanger-straps 6 will then rest closely against the under side of the vehicle-body and are secured by inserting fastenings therethrough to hold the heater below the body of the vehicle and bring the lid or upper portion of the heater practically on a level with the upper surface of the bottom of the body of the vehicle at a point directly below and in front of the seat. When the heater is so applied and secured, the lid or cover 12 may be freely raised to supply the receptacles 4 with oil or to trim the burners or for other purposes, and when the burners have been ignited the lid or cover 12 is closed and the heat passes up through the guard-plate 14 and the said lid or cover. The occupants of the vehicle may readily place their feet on the upper surface of the lid or cover, and the adjacent garments will be shielded from scorching or ignition through the construction heretofore explained. When a lap-robe is used and tucked in around the lower portions of the bodies of occupants of the vehicle having the heater arranged therein as set forth, a heating-chamber will be produced and the occupants will be prevented from having cold feet and limbs. In warm weather, when it is desired to dispense with the use of the heater, the latter may be de-

tached and a covering secured over the opening in the vehicle-body.

The improved heater is comparatively inexpensive in construction, and to accommodate double-seat vehicles two of the same may be used and the proportions varied to compensate for enlarged spaces to be heated. By arranging the chambers 2 in the manner set forth it will be seen that the oil or fuel contained in the receptacles 4 will always be in feeding proximity to the burners, and the angular disposition of the vehicle in moving over inclinations or grades or tilting to one side will not in the least affect the feed of the fuel to the burners.

Having thus fully described the invention, what is claimed as new is—

A vehicle-heater comprising a casing made of light sheet metal, and formed at its oppo-

site ends with integral offset portions having air-inlet perforations therein, heating means in the casing, a hanger-strap extending beneath each of the perforated offset portions, and having upwardly-bent ends formed with horizontally-disposed perforated terminals arranged below the upper edges of said casing, the upper edges of said casing being adapted to be bent into horizontal position to form flanges to cooperate with the perforated terminals of the strap to hold the heater in position upon a vehicle.

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

ISAAC F. SMITH.

Witnesses:

GEORGE STARKEY,
E. L. SMITH.