No. 739,664. PATENTED SEPT. 22, 1903.

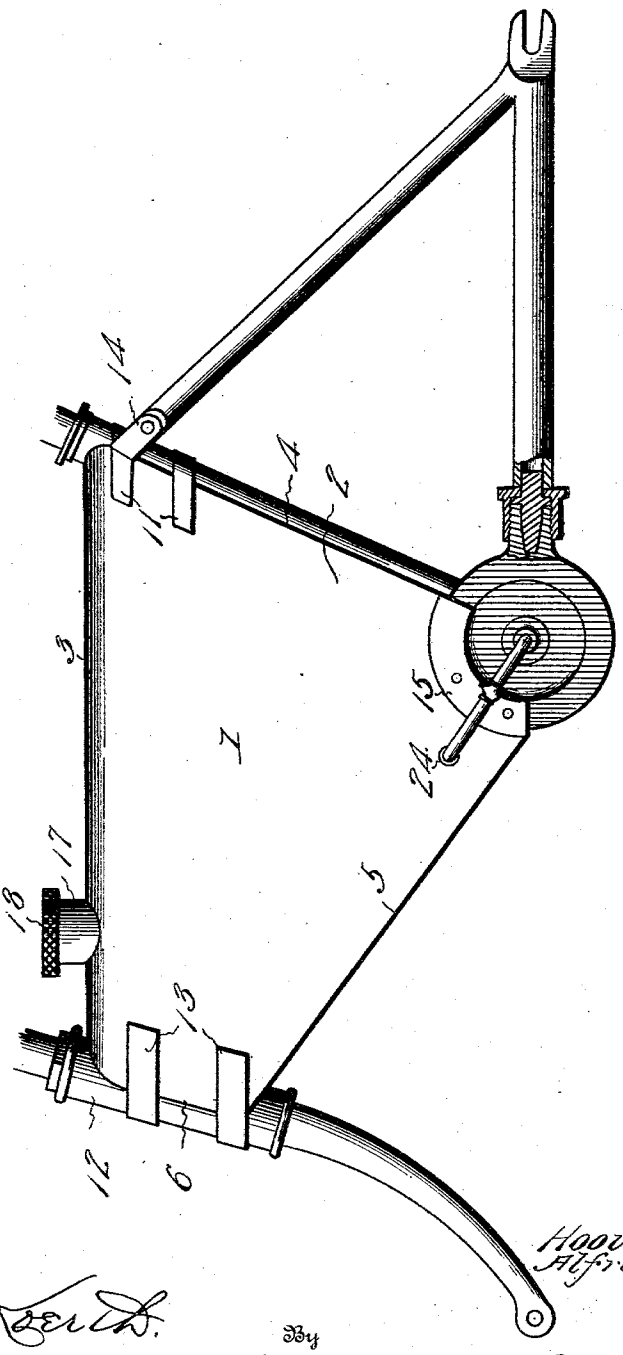
H. W. FREED & A. S. CLEGG.

MOTOR CYCLE FRAME.

APPLICATION FILED JAN. 30, 1903.

NO MODEL. 2 SHEETS—SHEET 1.

Fig. 1.



Witnesses
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MOTOR CYCLE FRAME.

APPLICATION FILED JAN. 30, 1903.

NO MODEL. 2 SHEETS—SHEET 2.

Fig. 2.

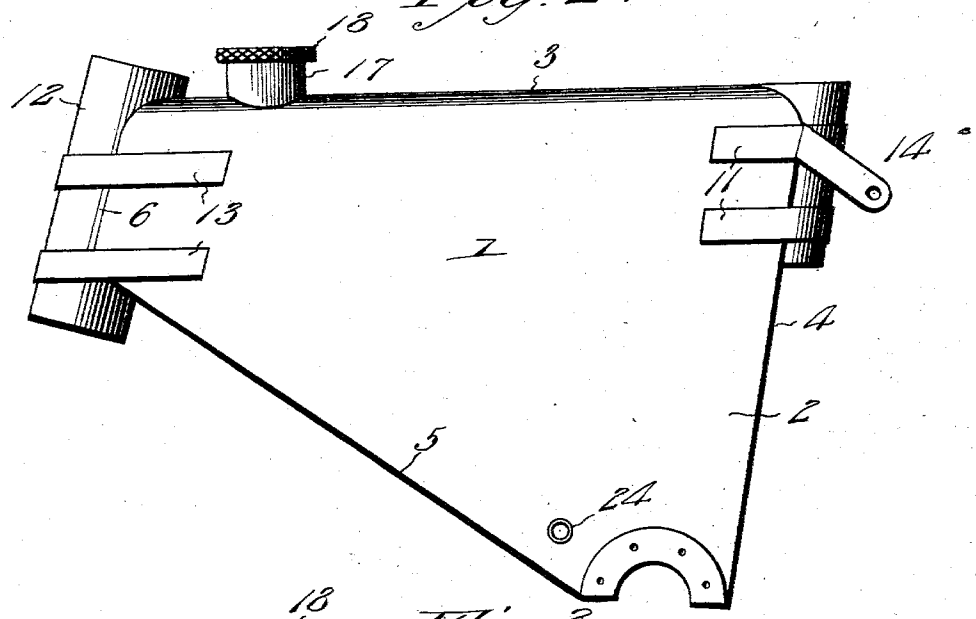


Fig. 3

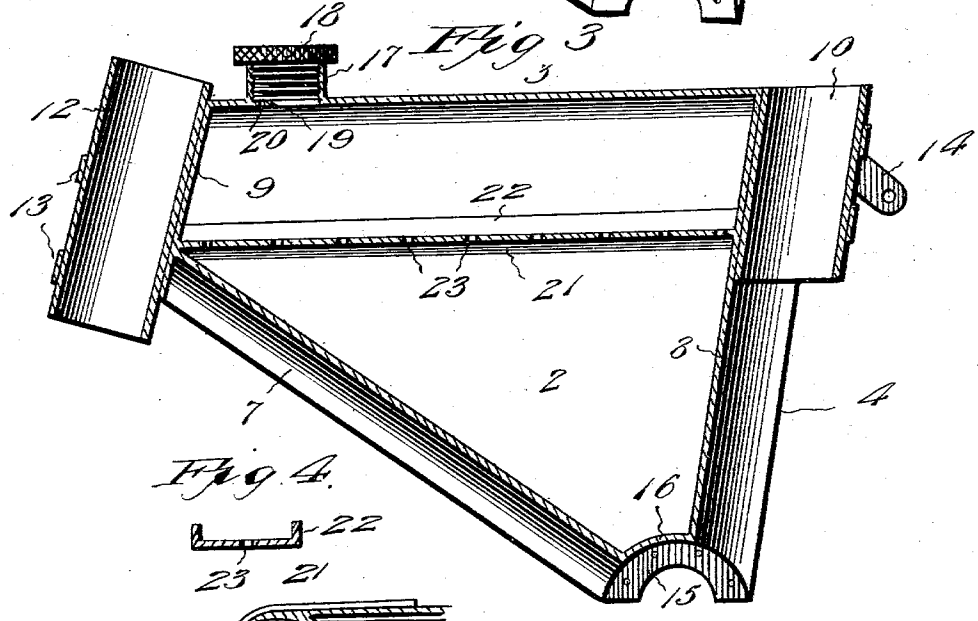
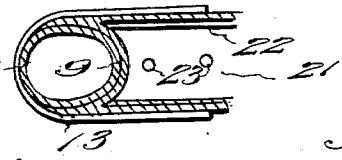


Fig. 4.

Fig. 5.



Witnesses

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No. 739,664. Patented September 22, 1903.

UNITED STATES PATENT OFFICE.

HOOVER W. FREED AND ALFRED S. CLEGG, OF YEAGERTOWN, PENNSYLVANIA.

MOTOR-CYCLE FRAME.

SPECIFICATION forming part of Letters Patent No. 739,664, dated September 22, 1903.

Application filed January 30, 1903. Serial No. 141,181. (No model.)

To all whom it may concern:

Be it known that we, HOOVER W. FREED and ALFRED S. CLEGG, citizens of the United States, residing at Yeagertown, in the county of Mifflin and State of Pennsylvania, have invented new and useful Improvements in Motor-Cycle Frames, of which the following is a specification.

This invention relates to a motor-cycle frame, the object in view being to provide in connection with such a frame a tank or reservoir for the storage and transportation of some suitable hydrocarbon—such as coal-oil, gasolene, or naphtha, and the like—which may be utilized as needed for supplying the engine by means of which the vehicle is driven. The tank or reservoir hereinafter described in addition to its function of an oil-receptacle also constitutes the main frame of the machine and adds materially to the strength and lasting qualities thereof.

With the above and other objects in view, the nature of which will more fully appear as the description proceeds, the invention consists in the novel construction, combination, and arrangement of parts, as will be hereinafter fully described, illustrated, and claimed.

In the accompanying drawings, Figure 1 is a sectional side elevation of a tank or reservoir constructed in accordance with the present invention, showing parts of the bicycle-frame connected therewith. Fig. 2 is an enlarged side elevation of the reservoir, omitting the front and rear forks. Fig. 3 is a central vertical section through the same. Fig. 4 is a detail cross-section through the intermediate flanged stay or brace. Fig. 5 is a detail horizontal section through the head-tube, showing how the same is combined with the main body of the tank or reservoir.

Like reference-numerals designate corresponding parts in all the figures of the drawings.

The tank or reservoir contemplated in this invention comprises a main body 1, having corresponding sides 2, the said sides being by preference formed integrally with each other from a single sheet-metal blank of requisite thickness, the blank being folded centrally to form an arched or rounded top 3 of the tank or reservoir, while the rear edges 4 are cut at an inclination to correspond with the pitch of the seat-post tube, the bottom edges 5 being cut at an inclination to agree with the pitch of the reach-bar, and the forward edges 6 being cut on a line with the head of the machine. The edges 5 are connected by a concaved bottom strip 7, while the rear edges 4 and the forward edges 6 are similarly connected by concaved back and front pieces 8 and 9, respectively, the said pieces 7, 8, and 9 forming the reach-bar, seat-post tube, and head of the machine-frame.

At the rear of the tank or reservoir is arranged a tube 10, which forms the seat-post cluster of the bicycle-frame. The tube 10 is complete in itself and is seated within the upper portion of the concaved back 8, as clearly shown in Figs. 1 and 2, the same being brazed or otherwise securely fastened in place therein. The connection between the tube 10 and the tank or reservoir may be further strengthened by means of a plurality of metal strips 11, passing around the tube 10 and having their terminal portions brazed or otherwise firmly secured to the sides 2 of the tank.

12 designates a head-tube, which is fastened in a manner similar to the tube 10 within the concaved front 9 of the tank, and this head-tube may also be additionally secured by means of a plurality of metal strips 13, similar to those, 11, above described. The strips 11 may be provided with angular extensions 14 to connect with the rear stays of the bicycle-frame, while the extreme lower portion of the tank will be flanged, as shown at 15, to adapt the tank to be connected with the casing of the motor.

16 designates a short curved wall connecting the bottom and back pieces 7 and 8, respectively.

The upper portion of the tank or reservoir is provided with an upwardly-extending neck 17, which is internally threaded to receive a screw-cap 18, by means of which the tank may be filled. The lower portion of the neck 17 contains a flange 19, against the edge of which the filling-funnel bears when placed in position to fill the tank. The flange 19 is provided with a vent-hole 20, which allows the air to escape from the tank as the same

is filled with oil. Extending across the interior of the tank or reservoir is an intermediate flanged stay or brace 21, consisting of a strip of metal of the requisite thickness having its opposite longitudinal edges bent at substantially right angles to form the flanges 22, which are brazed or otherwise firmly secured to the inner surfaces of the sides 2 of the tank. The stay or brace 21 is provided with a series of openings 23 to allow the oil to pass through it into the lower portion of the tank. The sides 2 and arched top 3 take the place of the ordinary top run or bar of the bicycle-frame, while the intermediate flanged stay or brace 21 acts as an additional stiffener for the frame, the rigidity of the frame being also increased by the downward extensions of the side portions of the tank, which are integral with the upper portion and arched or rounded top. The oil or other hydrocarbon is fed from the tank to the engine through a suitable outlet 24, which may be located at any convenient point in the tank.

From the foregoing description it will be seen that the tank or reservoir does not interfere with the rider, as it constitutes the diamond or main frame of the machine. The combined tank and frame may of course be made in various sizes and shapes to suit requirements, and therefore various changes may be made in form, proportions, and minor details of construction without departing from the principle or sacrificing any of the advantages of the invention.

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

1. A motor-cycle frame comprising a tank or reservoir of the size and shape of an ordinary cycle-frame, said tank or reservoir constituting the main frame of the machine substantially as described.

2. A tank or reservoir for motor-cycle frames, comprising a substantially triangular body, concaved bottom, back and front pieces and an intermediate flanged stay extending across the tank from front to rear and provided with openings, for the purpose specified.

3. A tank or reservoir for motor-cycle frames, comprising substantially parallel sides, a rounded top, concaved bottom, front and back pieces, a filling-neck, a cap therefor, and a perforated flange located at or near the junction of the neck and bottom of the tank.

In testimony whereof we affix our signatures in presence of two witnesses.

HOOVER W. FREED.
ALFRED S. CLEGG.

Witnesses:
WM. H. WREN,
L. JOE KOCH.