No. 731,689. PATENTED JUNE 23, 1903.

F. A. & H. F. KLOCKSIEM.

HYDROCARBON TRACTION ENGINE BODY.

APPLICATION FILED DEC. 27, 1902.

NO MODEL.

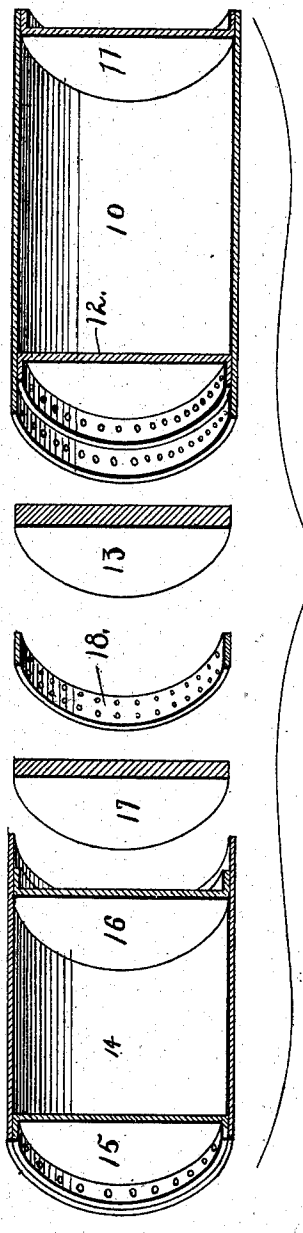


Fig. 1.

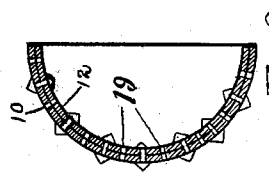


Fig. 3.

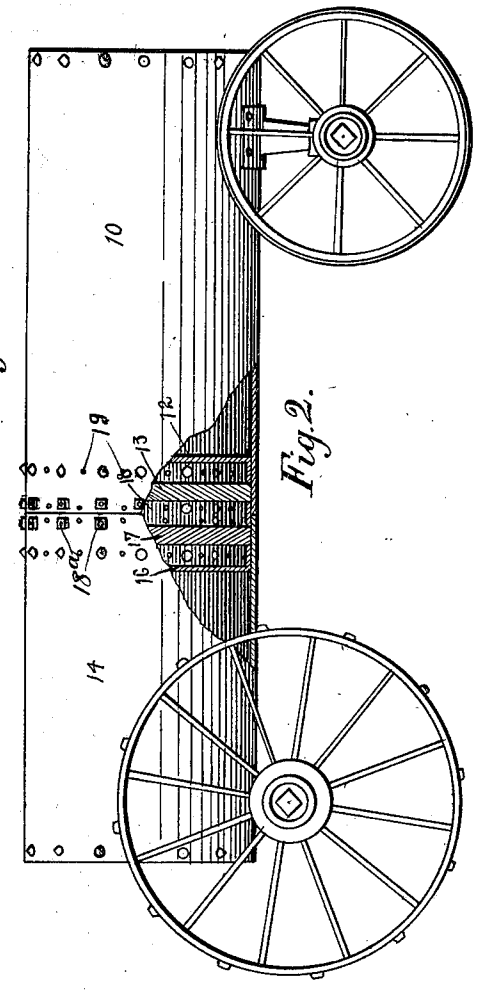


Fig. 2.

Witnesses
A. G. Hagus,
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by Orwig & Lane Atty's.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 731,689. Patented June 23, 1903.

UNITED STATES PATENT OFFICE.

FREDERICK A. KLOCKSIEM AND HENRY F. KLOCKSIEM, OF PATON, IOWA.

HYDROCARBON-TRACTION-ENGINE BODY.

SPECIFICATION forming part of Letters Patent No. 731,689, dated June 23, 1903.

Application filed December 27, 1902. Serial No. 136,872. (No model.)

To all whom it may concern:

Be it known that we, FREDERICK A. KLOCKSIEM and HENRY F. KLOCKSIEM, citizens of the United States, residing at Paton, in the county of Greene and State of Iowa, have invented certain new and useful Improvements in Hydrocarbon-Traction-Engine Bodies, of which the following is a specification.

The objects of our invention are to provide a body for hydrocarbon traction-engines of simple, strong, durable, and inexpensive construction, designed to support the engine proper and to contain water for cooling the engine and hydrocarbon for supplying the engine.

A further object is to provide an engine-body of this class in which the heat from the body of water will not be transmitted to the body of hydrocarbon, so that the hydrocarbon may be maintained at an even temperature while the engine is working without regard to the temperature of the body of water.

Our invention consists in certain details in the construction, arrangement, and combination of the various parts of the device whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in our claims, and illustrated in the accompanying drawings, in which—

Figure 1 shows in perspective a vertical longitudinal sectional view of the complete engine-body, the parts of which are slightly detached to illustrate their size and shape. Fig. 2 shows a side elevation of the complete engine-body mounted on wheels with parts thereof broken away to show the internal construction, and Fig. 3 is an enlarged detail sectional view illustrating the arrangement of the ventilating-openings.

Referring to the accompanying drawings, we have used the reference-numeral 10 to indicate a sheet-metal cylinder having the heads 11 and 12 provided with flanges projecting outwardly and riveted to the cylinder 10. At the inner end of the cylinder 10 the head 12 is placed a considerable distance from the end of the cylinder for the purpose of admitting a wooden disk-shaped head 13, the edges of which are designed to rest against the flange of the head 12, the said body portion being of such length beyond the head 12 as to project some distance beyond the outer face of the wooden head 13.

The numeral 14 indicates a cylinder similar to the cylinder 10, but of less length. It is provided with the flanged heads 15 and 16, riveted to the body portion, the inner heads 16 being placed a considerable distance from the inner end of the cylinder 14.

The numeral 17 indicates a wooden disk-shaped head designed to enter the inner end of cylinder 14 and rest against the flange of head 16.

The numeral 18 indicates a connecting and bracing rim designed to enter the adjacent ends of the cylinders 10 and 14 and to rest against the adjacent faces of the wooden partitions 13 and 17 when the adjacent edges of the cylinders 10 and 14 are together. This connecting and supporting rim is firmly connected to both cylinders 10 and 14 by screws 18^a, and obviously when thus connected the rim 18 and the flanges of the heads will serve to space apart the wooden disks 13 and 17 and firmly hold them in position.

It will be seen by the accompanying drawings that there are four separate rows of rivets and screws near the abutting ends of the cylinders, and we have provided means for permitting circulation of air through the chambers formed between the heads 12 and 16 by punching holes 19 between the rivet or screw holes of the said four rows, as illustrated in Fig. 3.

In practical use the cylinders 10 and 14 have their heads at the inner ends of the cylinders placed a considerable distance from the inner ends. Then the wooden disks are placed in the cylinder ends, resting against the flanges of the heads. Then the connecting and supporting rim is placed between the cylinder ends, resting against the wooden heads, and then the cylinder ends are connected by screws to the said connecting and supporting rim. The rim serves the double function of firmly connecting the two cylinders and also of spacing apart the wooden heads, and three air-chambers are provided between the interiors of the two cylinders, one between the wooden disks and two between the wooden disks and the cylinder-heads, and in each of these air-spaces are open-

ings 19 to permit circulation of air. Hence if the engine-body were used for water and gasolene and the water should become heated by reason of its being used for cooling an engine it is obvious that the heat will not be transmitted to the body of gasolene at the opposite end of the engine-body.

Having thus described our invention, what we claim, and desire to secure by Letters Patent of the United States therefor, is—

1. The combination of two cylinders, each having a head near its inner end, a disk in each cylinder spaced apart from the head, and a connecting and supporting rim in the adjacent ends of the cylinder and connected to the cylinder ends.

2. The combination of two cylinders, a flanged head in each cylinder with a flange projecting toward the adjacent end of the cylinder, a disk in each cylinder resting against said flange, and a rim inserted between the adjacent ends of the cylinders connected with the cylinders and engaging the disks to space them apart.

3. An improved engine-body, comprising two independent tanks, a flanged head near one end of each tank, a wooden disk in each tank resting against the flanged head, and a connecting and supporting rim placed in the ends of the tanks resting against both wooden disks and secured to both tanks, said tanks being provided with perforations between the heads and the disks and between the disks, for the purposes stated.

FREDERICK A. KLOCKSIEM.
HENRY F. KLOCKSIEM.

Witnesses:
Mrs. F. CLOSKSIEM,
J. W. KLOCKSIEM.