(No Model.)

J. H. JONES.

MOWER FRAME.

No. 406,738 Patented July 9, 1889.

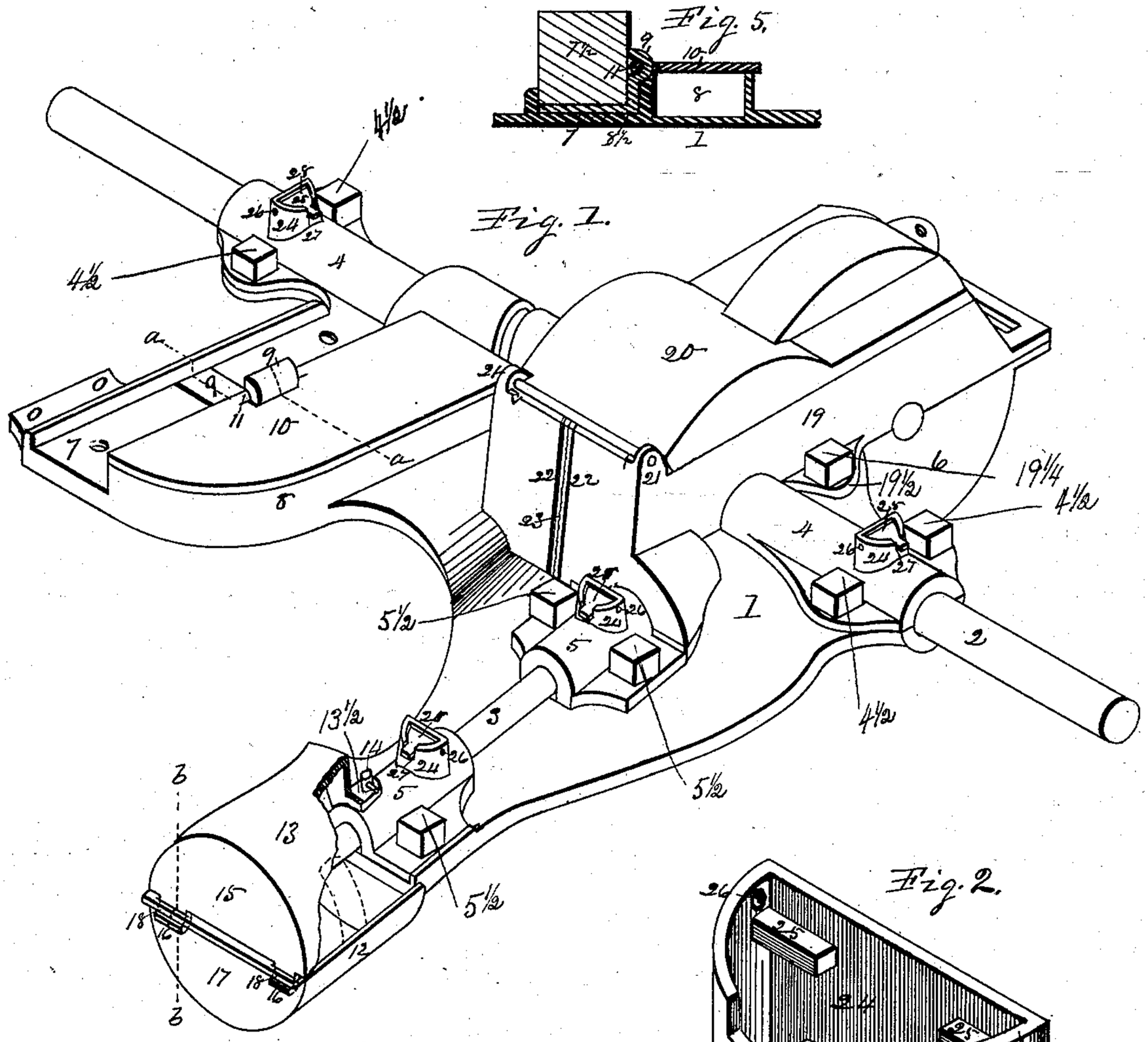

Fig. 1.

Fig. 5.

Fig. 2.

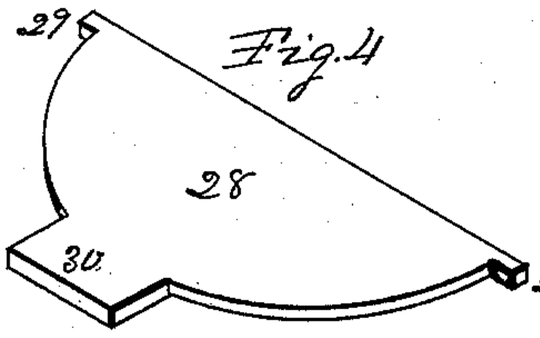

Fig. 4.

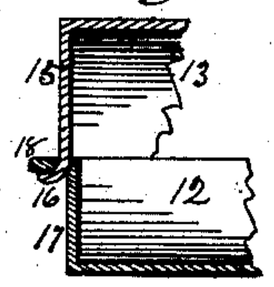

Fig. 6.

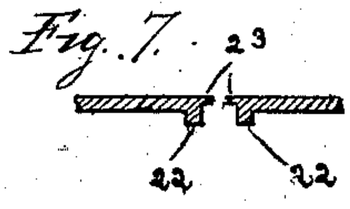

Fig. 7.

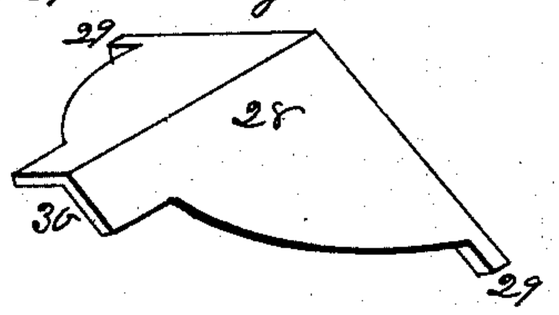

Fig. 3.

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UNITED STATES PATENT OFFICE.

JAMES HERVA JONES, OF ROCKFORD, ILLINOIS, ASSIGNOR TO THE EMERSON, TALCOTT & COMPANY, OF SAME PLACE.

MOWER-FRAME.

SPECIFICATION forming part of Letters Patent No. 406,738, dated July 9, 1889.

Application filed July 7, 1887. Serial No. 243,642. (No model.)

To all whom it may concern:

Be it known that I, JAMES HERVA JONES, a citizen of the United States, residing in the city of Rockford, in the county of Winnebago and State of Illinois, have invented certain new and useful Improvements in Mower-Frames, of which the following is a specification.

This invention relates to mowing-machines, but more especially to the part of a mowing-machine known as the "frame," "main frame," or "supporting-frame," which are now generally made of cast-iron.

The object of this invention is to produce a mowing-machine frame of a reliable, simple, and cheap construction, and that will require but little machine-work to fit it up; and it presents a number of advantageous points, all of which, in connection with the accompanying drawings, will be hereinafter more fully described.

In the drawings, Figure 1 is an isometrical representation of portions of a mowing-machine embodying my invention. Fig. 2 is an isometrical representation of the open end portion of an oil-box. Fig. 3 represents the cover to the oil-box, formed to be put in place and pressed to the form shown in Fig. 4. Fig. 5 is a transverse vertical section on dotted line *a*, Fig. 1, showing the hinge-connection of the lid of the tool-box. Fig. 6 is a vertical lengthwise section on dotted line *b*, Fig. 1, showing the hinge-connection of the cap with its lower portion. Fig. 7 is a sectional detail.

The bed-plate 1 of the frame in many respects is substantially the same as the bed-plate of mower-frames now in use, and it is formed to receive the axle 2 and the crank-shaft 3, both of which are held in place to revolve in their bearings by caps 4 and 5, fixed to the bed-plate by screw-bolts $4\frac{1}{2}$ and $5\frac{1}{2}$ in the usual manner. The bed-plate is also formed with the under portions 6 of the gear-case, and a recess 7 to receive the rear end portion of a tongue $7\frac{1}{2}$. (Shown in section in Fig. 5.) The bed-plate is formed with a tool-box 8 immediately on the stubble side of the tongue forward of the axle, and a transverse recess $8\frac{1}{2}$ is formed in the recess 7 to receive a hook portion 9 of the hinge to the lid 10 of the tool-box. A lid 10 to the tool-box is formed with an opening to receive the hook 9, and a bar 11 on its edge to enter within the hook, and forms the pintle of the hinge connecting the lid with the box; and the tongue $7\frac{1}{2}$, when in place, serves to hold the hook portion 9 of the hinge in place, and the lid in hinge-connection with the box, in a manner to permit it to open upward to a vertical position against the vertical side of the tongue.

The forward end 12 of the support to the crank-shaft is produced in semi-cylindrical hollow form, to receive the crank-head and its pitman-connection, and a casing thereto serves to protect its under side.

The cap portion 13 of the crank-head casing is also of semi-cylindrical form, and its head end 15 is provided with semi-hook arms 16, which enter openings formed in the upper edge portion of the head end 17 of the lower portion 12, and the bars 18 on its upper edge enter the hook-arms and form the pintle of the hinge-connection of the two detachable sections of the casing.

The rear end of the cap 13 is made in hasp form, as shown at $13\frac{1}{2}$, to receive a stud 14, which is perforated to receive a key or colter above the clasp to hold it in place in a removable manner.

In the figure a portion of the cap 13 is broken away to more clearly show the construction and arrangements of the said hasp, stud, and key. The side of the casing to the crank-head toward the cutting apparatus is slotted vertically to receive the pitman to the cutters, to permit its movement produced by the rotations of the wrist-pin in the crank-head. The upper portion of the gear-case consists of a lower section 19 and a lid 20. The lower section 19 is made in a single casting with perforated ears $19\frac{1}{2}$, projecting from its base edges, through which bolts $19\frac{1}{4}$ are passed to fix it to the bed-plate. The upper forward corners of the lower section, are provided with uprising perforated ears 21 as a part of the hinge to the lid 20.

Ribs 22 project from the outer face of the forward end of the lower section, extending

up and down near its middle portion, and the portion of the casing between the vertical ribs is of less thickness than its vertical walls, to be readily broken by hammer taps or otherwise, to form a separation between the ribs, as represented by the waved line 23.

The lid 20 is of proper conformation and size to engage the upper edge of the lower section 19, and its forward end is provided with sidewise-projecting pintles, which enter the perforated ears 21 of the lower section and form the hinge-connection of the lid therewith.

In putting the lid in place the lower section by means of its separated forward end wall is spread to an extent to permit the pintles of the lid to enter the perforated ears, and the casing is then bolted in place to the bed-plate.

The several caps to the bearings are provided with oil-receptacles 24, which in this instance are of semicircular form in plan, and their bottoms are perforated to permit the oil contained in the receptacle to flow onto the journal supported to revolve in the bearing. The perforation to permit a flow of oil to the bearing is not shown, but may be any suitable form. The oil-receptacle may be either formed integral with the said castings or secured thereto in any well-known and approved manner. Lid-supports 25 project from the inner face of the diameter-wall of the receptacle, and perforations 26 are formed in the peripheral wall thereof immediately above the lid-supports. A recess 27 is formed in the center of the arching wall of the oil-receptacle to receive a lip of a lid to the chamber.

The lid 28 is cut from plate material to the required size and conformation to conform to the opening of the receptacle, and its opposite ends are provided with pintle projections 29 to enter the perforations 26, and its arching portion is provided with a lip projection 30 to enter the recess 27 in the peripheral wall of the oil-receptacle.

The lid 28 is bent in an angular or arching form, substantially as shown in Fig. 3, and it is then placed in position in the receptacle, and is pressed or otherwise forced to its plate position, which causes its pintles to enter the perforations in the peripheral walls, and forms a hinge-connection of the lid, and its lip portion will enter the recess formed therein.

I claim as my invention—

1. In a mowing-machine frame, the combination of a tool-box, a lid to the tool-box, and a hinge connecting the lid to the box, the hinge consisting of a pintle and a hook, one of these two parts being formed integral with the lid, and the hook being held in engagement with the pintle by a removable part of the frame, substantially as set forth.

2. In a mowing-machine frame, the combination of a tongue, a tool-box, a lid for the tool-box, and a hinge for connecting the lid to the box, the said hinge consisting of a pintle and a hook, one of the parts being formed integral with the lid and the other locked to the frame by the tongue, substantially as set forth.

3. In a mowing-machine frame, the combination of a tongue removably secured to the frame, a tool-box, a tool-box lid, and a hinge for connecting the tool-box lid with the box, the said hinge consisting, essentially, of a pintle formed integral with the lid, and a hook having a shank bent to conform to the tongue-seat in the frame, whereby the securing of the tongue to the frame locks the hook of the hinge against displacement, substantially as set forth.

4. The combination, in a mower, of the frame constructed to form the lower portion of the gear-case, the upper portion of the said case composed of two sections, the lower section of the said upper portion having a split wall and perforated hinge-ears at opposite ends of the said wall, the top section of the upper portion being a lid with projecting pintles to enter the perforated ears in the lower section, the split wall springing apart in order to allow the pintles to be secured in the ears, substantially as set forth.

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Witnesses:
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