

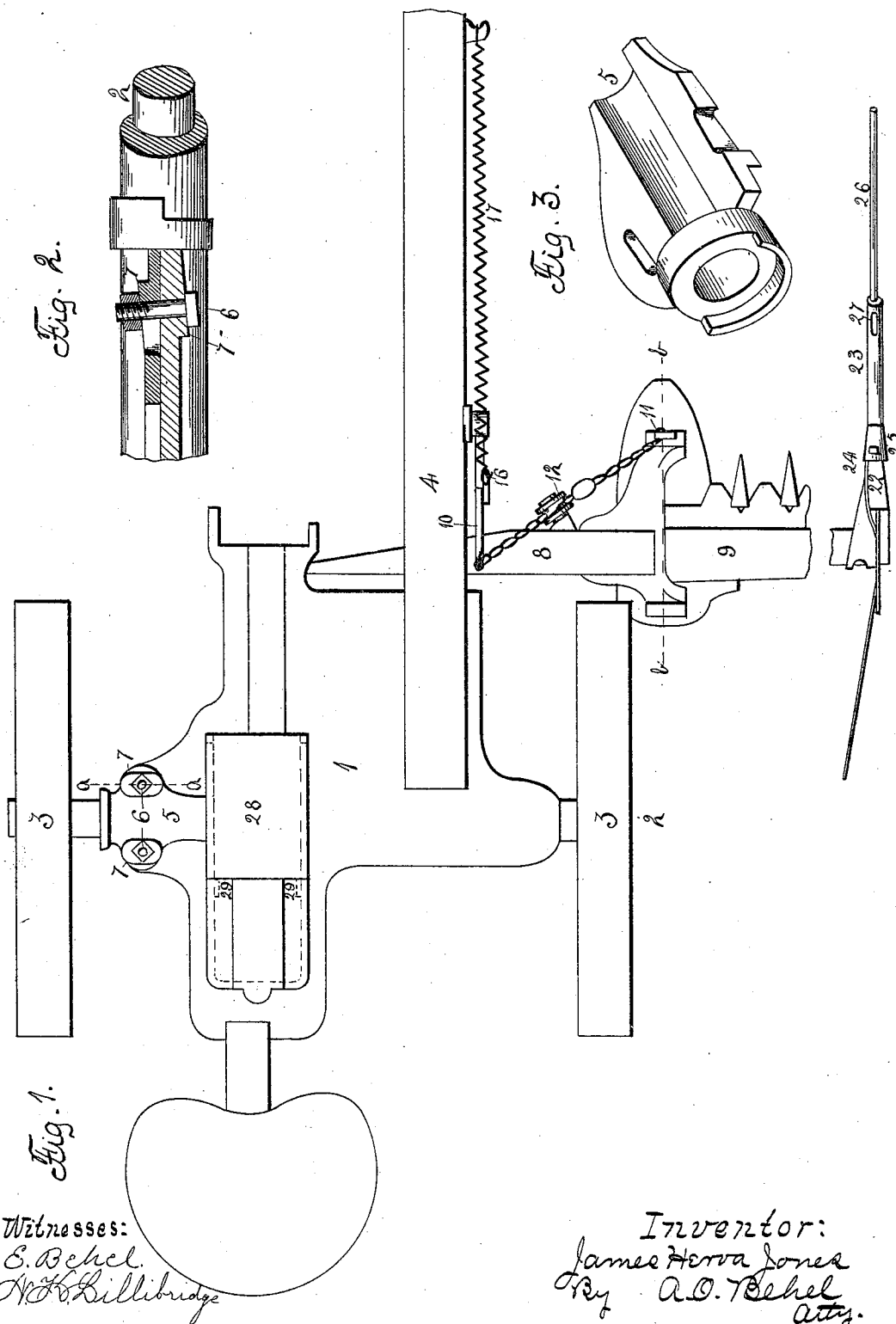
(No Model.)

2 Sheets—Sheet 1.

J. H. JONES.
MOWING MACHINE.

No. 579,926.

Patented Mar. 30, 1897.



Witnesses:
E. Behel.
W. B. Lillibridge.

Inventor:
James Herra Jones
By A. O. Behel
Atty.

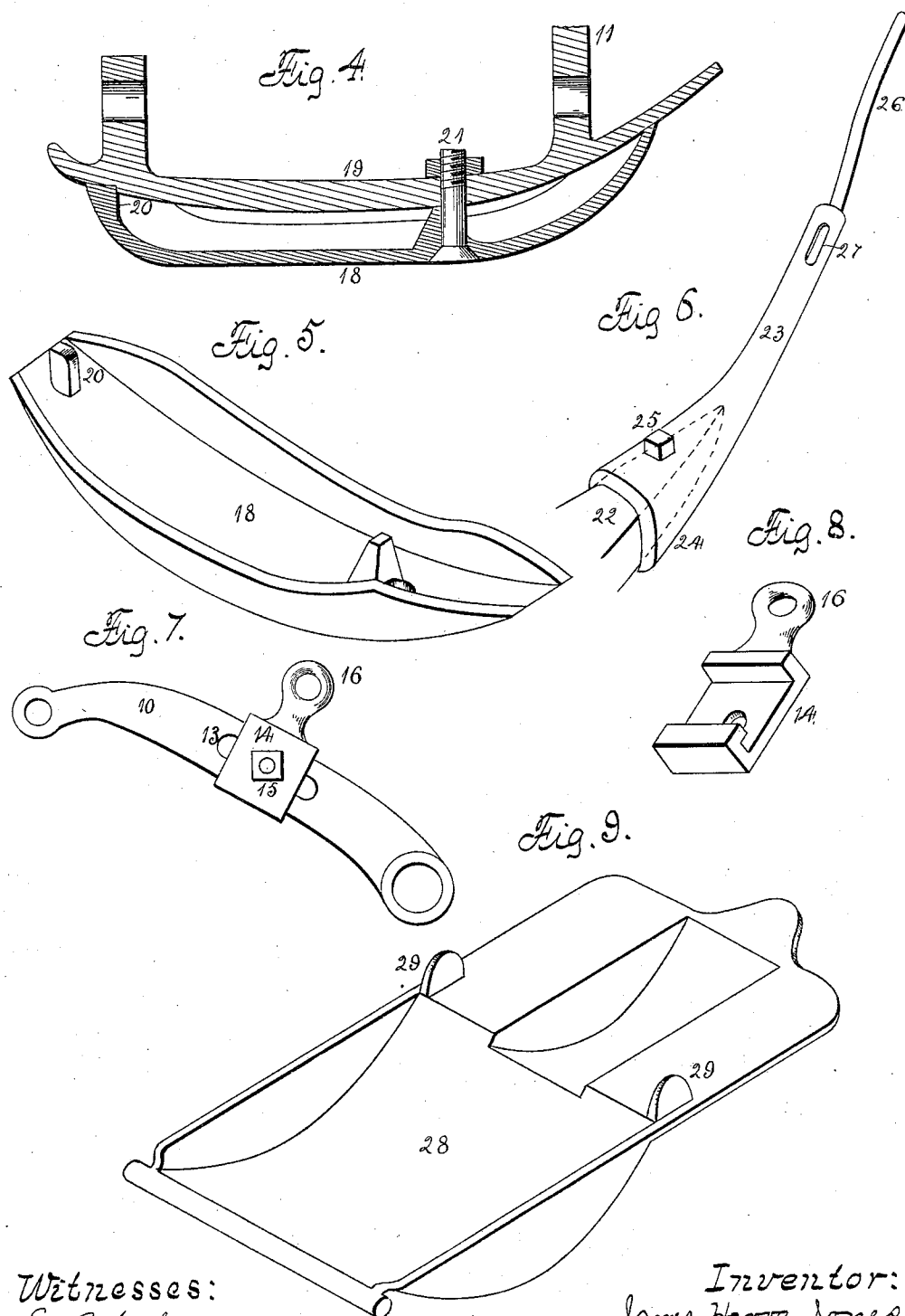
(No Model.)

2 Sheets—Sheet 2.

J. H. JONES.
MOWING MACHINE.

No. 579,926.

Patented Mar. 30, 1897.



Witnesses:
E. Behel
A. C. Billibridge

Inventor:
James Herra Jones
By A. C. Behel
Atty.

UNITED STATES PATENT OFFICE.

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

MOWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 579,926, dated March 30, 1897.

Application filed October 30, 1891. Serial No. 410,389. (No model.)

To all whom it may concern:

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

The improvements represented in this application are mainly of a detailed form, which when applied to the main frame of a mowing-machine constitute its various operative parts.

In the accompanying drawings, Figure 1 is a plan view of a mowing-machine embodying my improvements. Fig. 2 is a vertical section of the cap shown at Fig. 3 on dotted line *a*, Fig. 1. Fig. 3 is an isometrical under-face representation of the cap employed to take up the end wear of the drive-wheels. Fig. 4 is a vertical central section through the inner shoe on dotted line *b*, Fig. 1, showing a supplemental shoe attached to its under side. Fig. 5 is an isometrical representation of the supplemental shoe. Fig. 6 is an isometrical representation of a portion of the outer divider, showing the supplemental divider connected therewith. Fig. 7 is an elevation of the compensating lever. Fig. 8 is an isometrical representation of the clip employed in connection with the compensating lever. Fig. 9 is an isometrical representation of the under face of the cover to the gear-casing.

In order to show the application of my improvements it will be necessary to make a detailed description of the various parts of a mowing-machine which are old. The main frame 1 of the machine represented in the accompanying drawings is supported upon an axle 2, upon the outer ends of which are located the supporting-wheels 3. To the main frame is secured a tongue 4.

After a mowing-machine has been in use for some time the meeting surfaces of the inner hubs of the wheels and the faces of the main frame lying in contact therewith become worn, and I have provided a means for taking up the wear, which is a cap 5, placed over the axle and secured to the main frame by the bolts 6, passing through the cap and the main frame. The opening in the cap through which this bolt passes is elongated

in the direction of the shaft, and the upper faces of the cap and the lower under face of the bed against which the head of the bolt and the nut come in contact are provided with inclined faces 7. By means of these inclined faces the bolts stand at a slight angle to the vertical, and by loosening the nuts the cap may be moved toward the hub-wheel sufficiently to take up the wear, and by turning them down in contact with the inclined faces the cap will be prevented from moving inward.

To the main frame of the machine, forward of the supporting-wheels, I attach the cutting apparatus, consisting of the coupling-bar 8 and finger-bar 9.

The spring-lift applied to this machine is the same as that granted to me by Letters Patent No. 454,741, dated June 23, 1891, and which consists of the spiral spring 17, located in the lengthwise direction of the tongue, which has a connection with the compensating lever 10, said lever making a connection with an arm 11 rising from the finger-bar portion of the cutting apparatus. The connection between the compensating lever and the finger-bar is flexible and passes under a sheave 12, attached to the coupling-bar.

My improvement consists in the adjustable connection between the spring and the compensating lever, which consists of the compensating lever provided with a slot 13 in its lengthwise direction and a hook 14 centrally perforated, through which and through the slot of the compensating lever passes the bolt 15. The end of this hook encircles the rear or lower side of the compensating lever, against which it has a firm seat, and is adjustable in its connection with the compensating lever to the extent of the slot. The free end of this hook is provided with an eye 16, to which the end of the spring is connected. By means of this adjustable connection between the spring and the compensating lever I am able to regulate the lifting force of the spring by changing the point of connection with the lever, so that the spring will exert more or less force upon the cutting apparatus.

In mowing-machines which are constructed for the California trade, where the soil upon

which the machine is to be used is of a sandy nature, it is desirable to elevate the inner shoe a greater distance from the ground than is necessary in ordinary cutting. For this purpose I have provided a supplemental shoe 18, which is secured on the under face of the inner shoe 19 by the lip 20, entering a recess formed in the under side of the shoe, and a bolt 21 holds the supplemental shoe in place with the inner shoe and which can readily be detached by removing the bolt when the machine is to be used in ordinary cutting. To the outer divider 22 I attach a supplemental divider, which consists of a shank 23, having both ends in socket form. The lower end 24 fits the horn of the outer divider and is held in place by a set-screw 25. Into the upper socket is placed a wire rod 26, which is held in position by compressing the sides of the opening 27. By this arrangement any length of rod may be employed, according to the condition of the grain to be cut. The casing for the gearing is in two sections. The lower section (shown in dotted line, Fig. 1) is attached to the main frame in any suitable manner. The cover 28 or upper section of the gear-casing has a pivotal or hinge connection with the lower section, and from the under face of this cover depends two wedge-shaped lugs 29, which when the cover is closed enter within the lower section, and by reason of their wedge shape form a frictional connection between the cover and the lower section.

35 I claim as my invention—

1. In a harvesting-machine, a gear-casing composed of a lower section and a cover, the cover provided on its under face with bevel-faced lugs which enter the upper face of the lower section, thereby forming a frictional connection between the cover and the section.

2. In a harvesting-machine a journal-cap secured to the main frame by bolts passing through the cap and the frame, said cap hav-

ing its end of circular form, through which end the drive-shaft passes the upper face of the cap and the lower face of the bed being provided with incline surfaces, for the purpose of holding the cap in its outward position.

3. In a harvesting-machine, a compensating lever having a pivotal connection with the main frame at one end, its other end having a connection with the cutting apparatus, a spring having a connection with the lever made adjustable in the lengthwise direction of the lever.

4. In a harvesting-machine a compensating lever provided with an elongated opening, a hook engaging one face of the lever and held in position by a bolt passing through the opening and the hook, the free end of the hook provided with an eye.

5. In a harvesting-machine, a supplemental shoe for the under side of the inner shoe, having a projection at its rear end fitting within a recess in the inner shoe, a central projection lying against the under face of the shoe, and a hole in the last-named projection, a bolt passing through the hole and inner shoe the supplemental shoe having vertical sides, and a portion of their length lying in contact with the under face of the inner shoe.

6. In a harvesting-machine the outer divider provided with a supplemental divider, said supplemental divider having its ends in socket form, one socket to fit the outer divider and the outer socket to receive a wire or rod for separating the grain, the latter socket provided with an opening which permits the rod to be held in place by compressing the sides of the opening.

JAMES HERVA JONES.

Witnesses:

C. JACKSON,
L. L. MILLER.