

No. 862,815.

PATENTED AUG. 6, 1907.

L. P. FOSNOT.
GRIP CONTROLLING MECHANISM FOR MOTOR CYCLES.

APPLICATION FILED JULY 19, 1906.

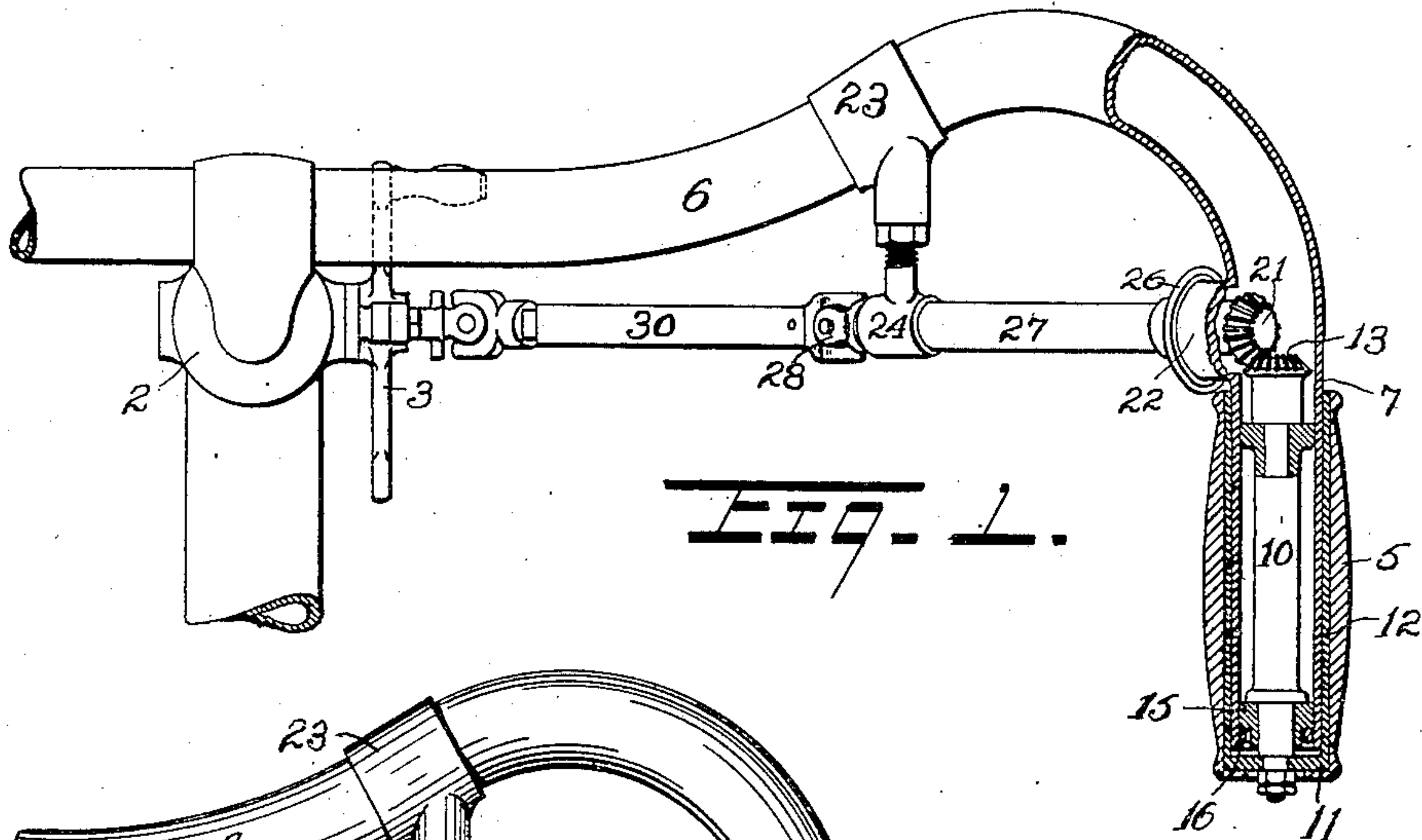


FIG. 1.

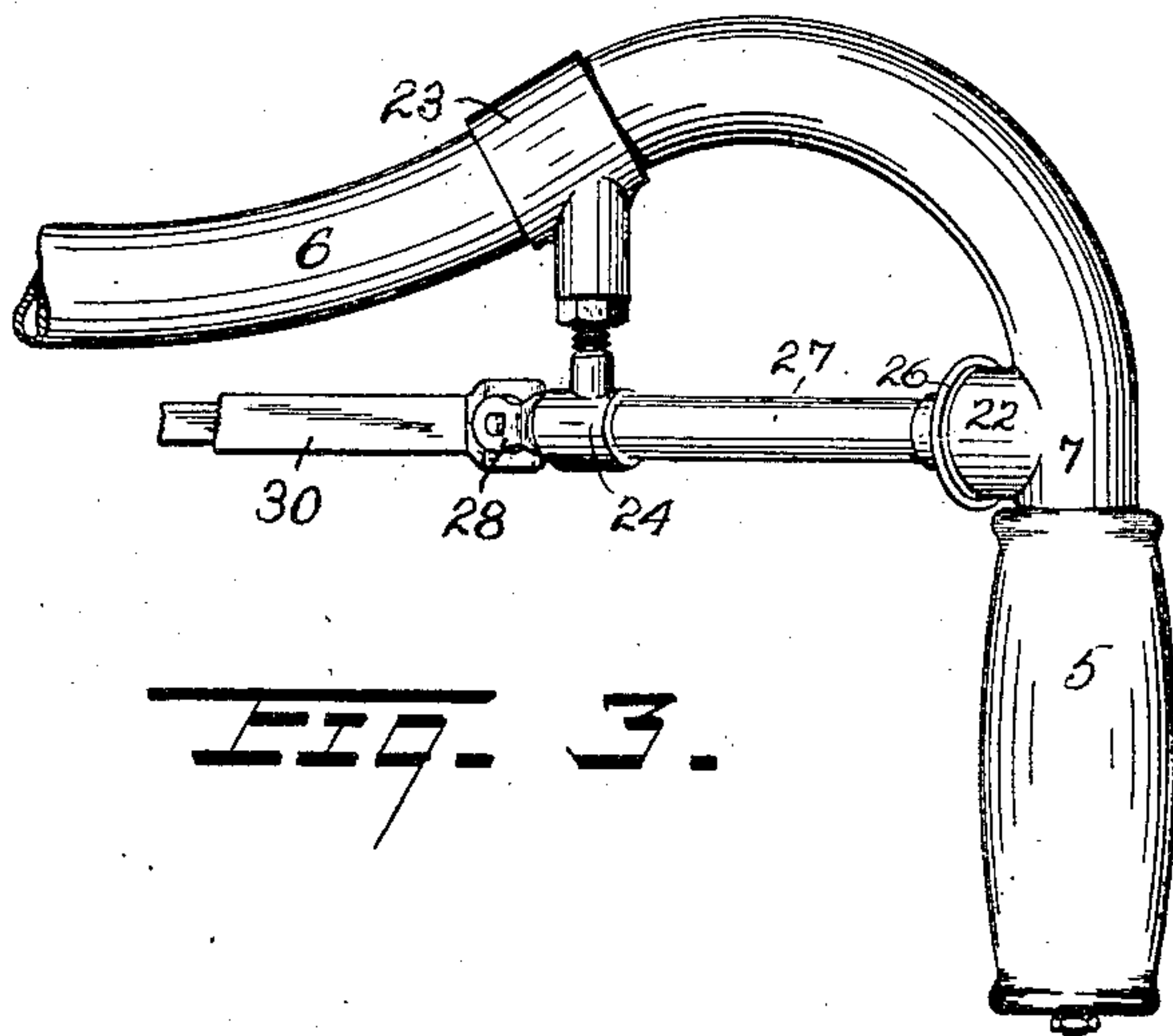


FIG. 3.

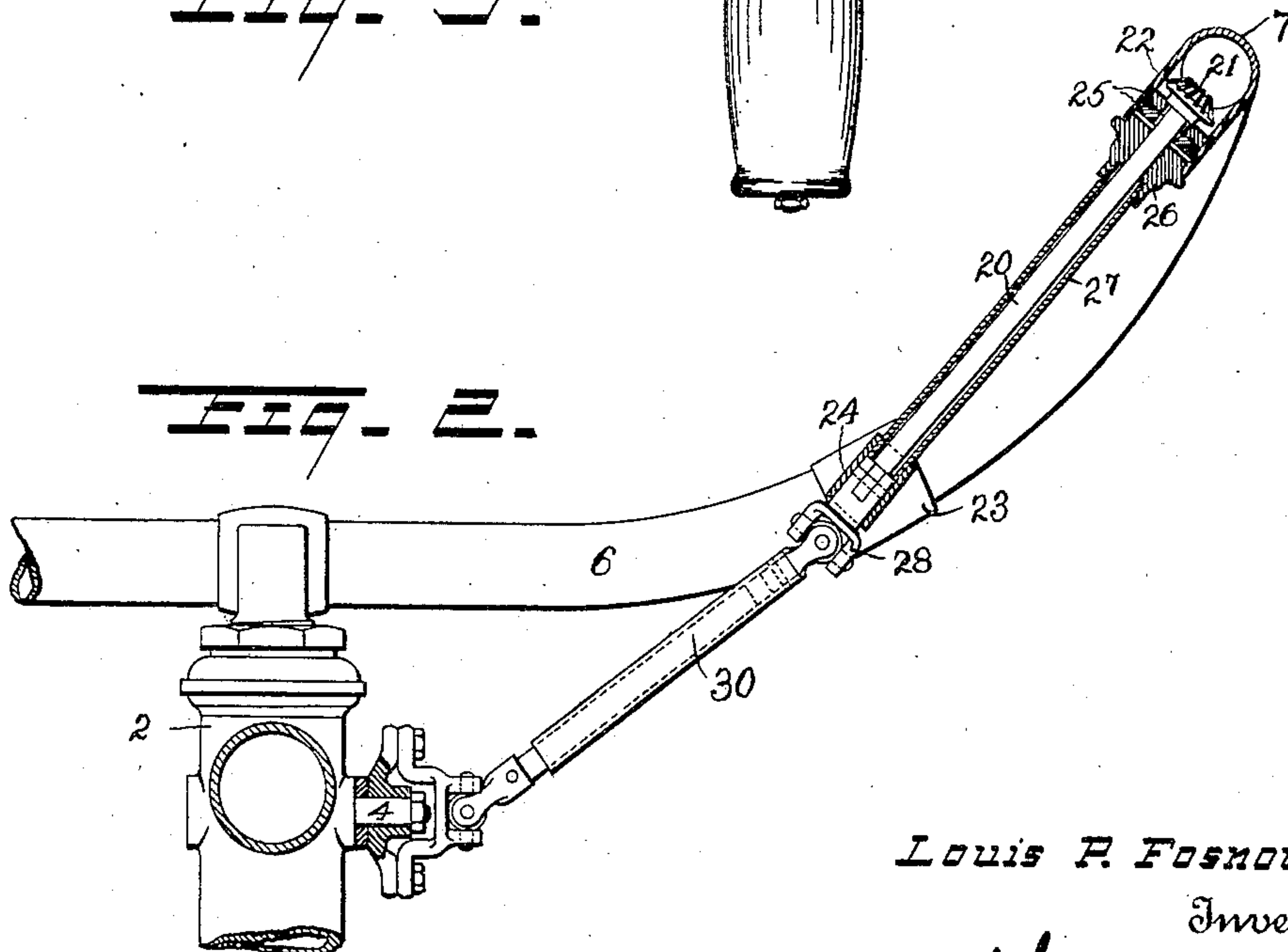


FIG. 2.

Louis P. Fosnot,
Inventor

Witnesses
Caleb J. Picher.
D. M. Husack

By *[Signature]*
Attorney

UNITED STATES PATENT OFFICE.

LOUIS P. FOSNOT, OF READING, PENNSYLVANIA, ASSIGNOR TO WILLIAM F. REMPPIS, OF READING, PENNSYLVANIA.

GRIP-CONTROLLING MECHANISM FOR MOTOR-CYCLES.

No. 862,815.

Specification of Letters Patent.

Patented Aug. 6, 1907.

Application filed July 19, 1906. Serial No. 326,805.

To all whom it may concern:

Be it known that I, LOUIS P. FOSNOT, a citizen of the United States, and a resident of the city of Reading, county of Berks, and State of Pennsylvania, have invented certain new and useful Improvements in Grip-Controlling Mechanism for Motor-Cycles, of which the following is a specification.

My invention relates particularly to that class of motor-driven cycles in which provision is made for controlling the motor by means of the grip on the handle bar, so as to enable the operator to simultaneously steer the vehicle and control the motor.

The invention consists in the improved construction and arrangement of the handle bar and its attachments whereby the rotary grip movement is positively transmitted as desired to the motor-controlling means provided upon the body of the machine; and is fully described in connection with the accompanying drawings illustrating a preferred embodiment of my invention, the novel features being clearly pointed out in the claims.

Figure 1 is a partly sectional plan view of a portion of a handle-bar of a motor cycle having my invention applied thereto; the controlling lever only of the motor with which the cycle is provided being indicated. Fig. 2 is a partly sectional elevation of the same. Fig. 3 is a full view similar to Fig. 1.

Only the head 2 of a motor cycle frame is shown in the drawings; the motor-controlling lever or member 3, from which the required movements may be conveyed to the motor in any known manner, being mounted upon a bearing pin 4 on said frame head, so as to be rocked thereon by the rotation of the grip 5 upon the end of the swinging handle-bar 6, through suitable connecting means;—the novel form and arrangement of which latter, forming the sole subject matter of my invention, need only be fully described.

The handle-bars 6, which are secured as usual to the steering fork mounted in the frame head 2, are shown in the drawing as of ordinary general form; steel tubing being commonly employed, the outer portions 7 of which are bent rearwardly towards the operator and provided with suitable grips. These grips, in the type of motor cycle to which my invention relates, being rotatably mounted on the end of the bar so as to serve the further purpose of operating the motor controlling levers 3 as previously stated.

The main object of my invention is to provide a positively acting and accurately adjustable operating mechanism, the main portions of which are compactly arranged and inclosed so as to form a simple and neat handle-bar structure. To this end I utilize the rearwardly-bent tubular portion 7 of the handle-bar, in connection with an added portion extending at approximately right angles thereto and parallel with the main

portion of the bar, for mounting and inclosing the main operating connections between the grip 5 and the motor controlling lever 3. One of these connections is an axial stem 10 which is fixed to the end 11 of the grip-shell 12, and extends forward into the tubular bar far enough to locate its inner end, which is provided with a small bevel gear 13, beyond the grip 5. To provide for accurately adjusting this bevel gear relative to the connecting shaft hereafter described, and to at the same time rotatably retain the grip upon the bar, the shank of the stem 10 is passed through a screw-plug 15 which is adjustably secured by a lock-nut 16 in the end of the handle bar.

The connecting shaft 20 has its bevel-gear end 21 passed through a shaft-bearing branch 22 formed on the inner side of the handle bar portion 7, so as to engage the bevel gear 13 of the grip stem 10. For the proper mounting of this shaft, a fitting 23 is provided on the main portion of the handle bar, to which fitting there is adjustable secured, as shown, a bearing-sleeve 24 in which the opposite end of the shaft is thus rotatably mounted. The shaft-bearing branch 22 of the handle bar is internally screw threaded, as shown, and provided with adjusting nuts 25 for accurately adjusting the shaft longitudinally, and with a bearing-plug 26 which is connected with the bearing sleeve 24 by a sheathing tube 27 for the shaft, only the forked end 28 of which latter is thus exposed for a universal joint attachment of the ordinary telescopic connecting link 30 to the motor-controlling lever 3.

The neat appearance of my improved handle bar with the operating connections to the grip hiddenly mounted therein as described, is clearly indicated in Fig. 3; and the positive operation and ready adjustment of the parts provided for, will be easily understood.

The preferred detail construction shown and described may obviously be modified without departing from the invention.

What I claim is:—

1. In a grip-operated controlling mechanism for motor cycles, the combination with the motor-controlling lever and the tubular handle bar having a rotatable grip thereon and a transverse shaft-bearing adjacent the inner end of said grip, of an operating connection to said lever comprising a rotary shaft having one end thereof mounted in said transverse shaft bearing and provided with a pinion, said rotatable grip being provided with a gear arranged in mesh with said pinion.

2. In a grip-operated controlling mechanism for motor cycles, the combination with the motor-controlling lever and the tubular handle bar, of a grip rotatably mounted on said bar and having an axial stem provided with a terminal bevel gear, a shaft mounted on said bar and having one end thereof provided with a bevel gear arranged in engagement with said axial stem within the hollow bar, and an operating connection between the other end of said shaft and the controlling lever.

3. In a grip-operated controlling mechanism for motor cycles, the combination with the motor-controlling lever

and the tubular handle bar, of a grip rotatably mounted on said bar and having a longitudinally adjustable axial stem secured thereto and provided with a terminal bevel gear, a shaft mounted on said bar and having one end thereof
5 provided with a bevel gear arranged in adjustable engagement with said axial stem within the hollow bar, and an operating connection between the other end of said shaft and the controlling lever.

4. In a grip-operated controlling mechanism for motor
10 cycles comprising a controlling lever, a tubular handle-bar provided with a rotatable grip having an axial stem with a terminal bevel gear, said bar having a shaft bearing opening through the wall thereof adjacent said stem gear and a shaft bearing fitting thereon carrying a shaft bearing sleeve, and a shaft mounted in said bearings and arranged to communicate the grip movement to said controlling lever.
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5. In a grip-operated controlling mechanism for motor cycles comprising a controlling lever, a tubular handle-bar provided with a rotatable grip having an axial stem with
20 a terminal bevel gear, said bar having a shaft bearing opening through the wall thereof adjacent said stem gear, a shaft bearing fitting thereon carrying a shaft bearing sleeve, and a shaft sheath connecting said bearings, and a shaft mounted in said bearings and sheath and arranged
25 to communicate the grip movement to said controlling lever.

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

LOUIS P. FOSNOT.

Witnesses:

CALEB J. BIEBER,
D. M. STEWART.

It is hereby certified that Letters Patent No. 862,815, granted August 6, 1907, upon the application of Louis P. Fosnot, of Reading, Pennsylvania, for an improvement in "Grip-Controlling Mechanism for Motor-Cycles," were erroneously issued to "William F. Remppis" as owner of said invention; whereas said Letters Patent should have been issued to *Reading Standard Company, a corporation of Pennsylvania*, as assignee of the entire interest in said patent, as shown by the record of assignments in this office; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 15th day of October, A. D., 1907.

[SEAL.]

E. B. MOORE,
Commissioner of Patents.