

No. 782,548.

PATENTED FEB. 14, 1905.

E. N. DICKERSON.
CONTROLLER FOR AUTOMOBILES.

APPLICATION FILED NOV. 1, 1904.

3 SHEETS—SHEET 1.

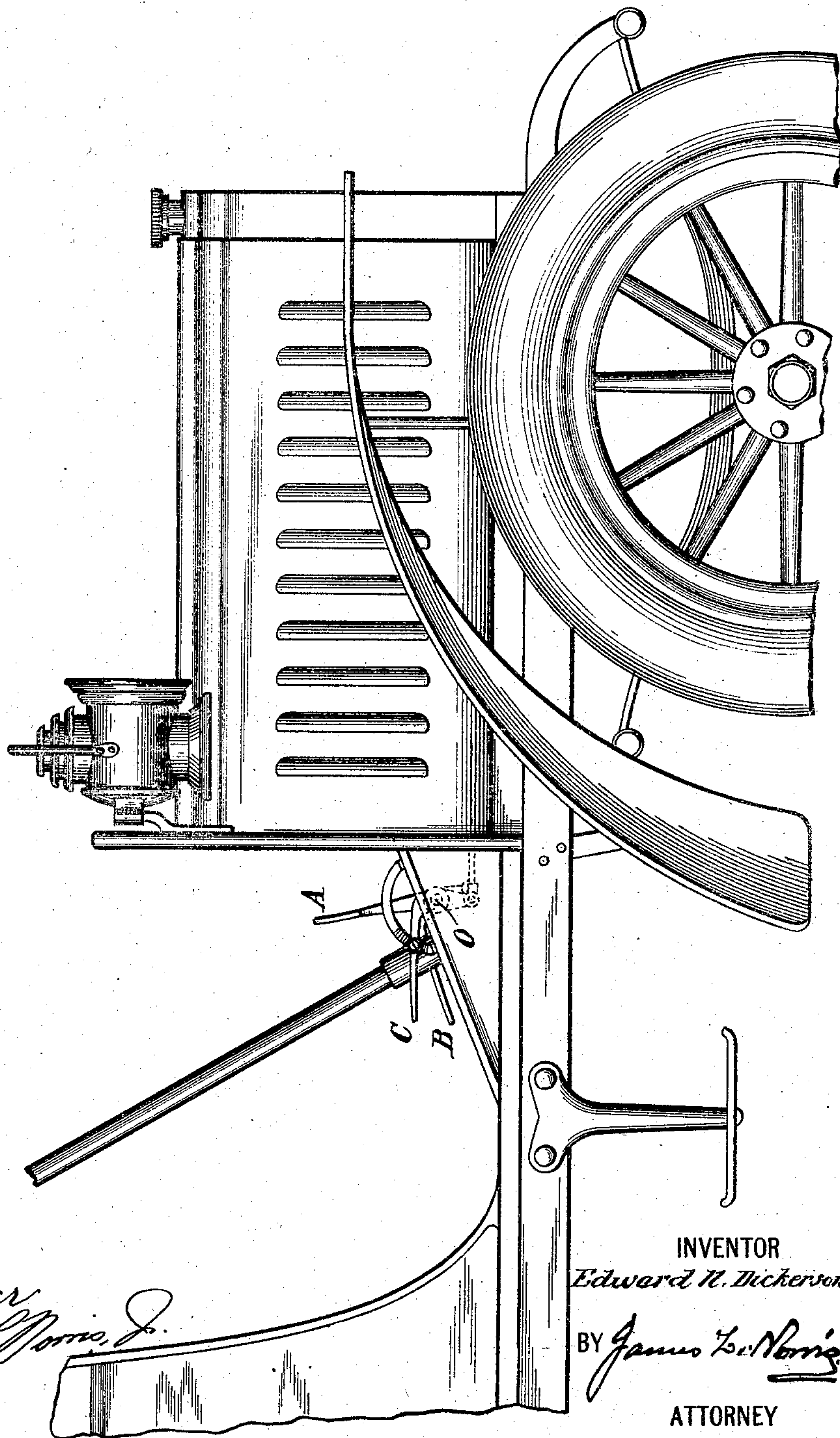


Fig. 1.

WITNESSES:

C. D. Kessler
James L. Morris, Jr.

INVENTOR

Edward N. Dickerson

BY *James L. Morris*

ATTORNEY

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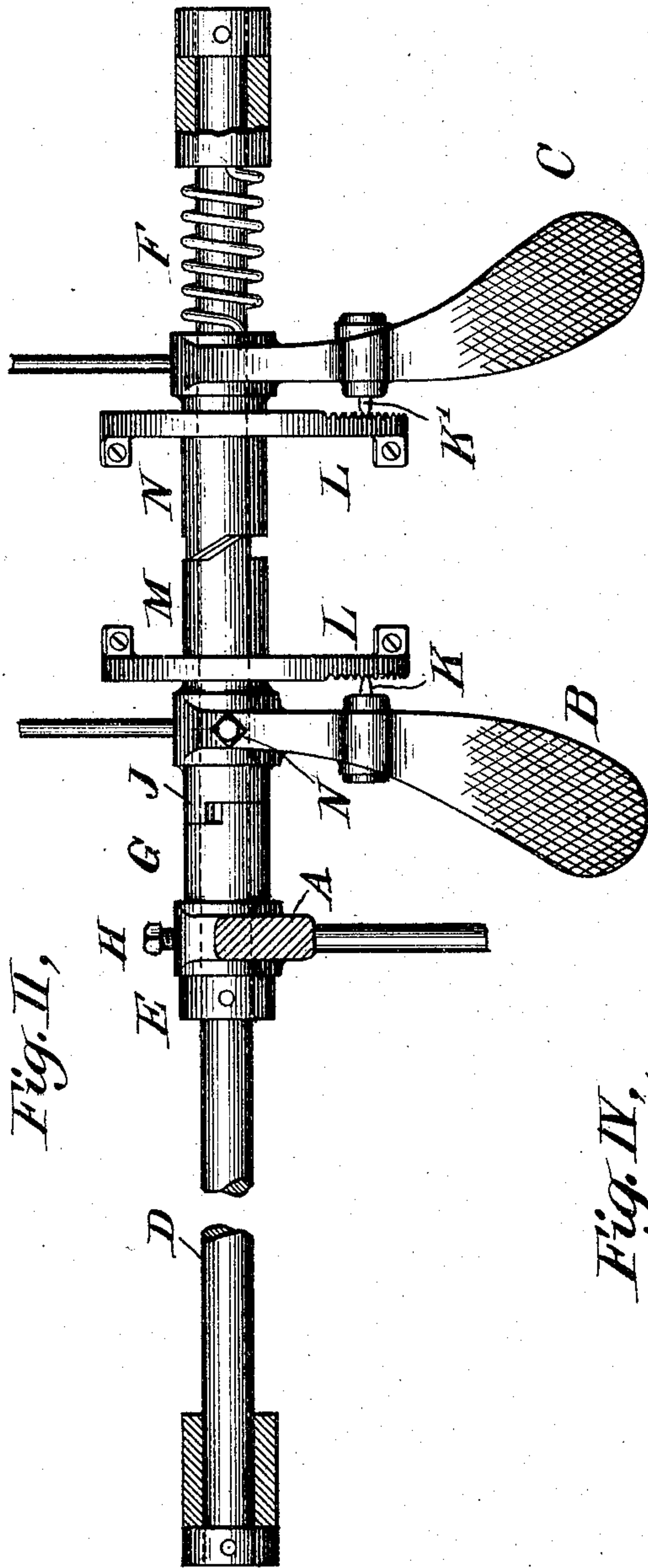
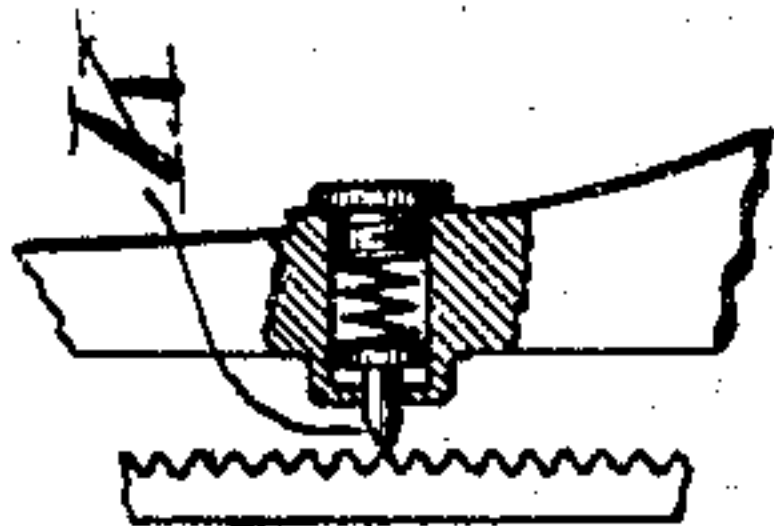
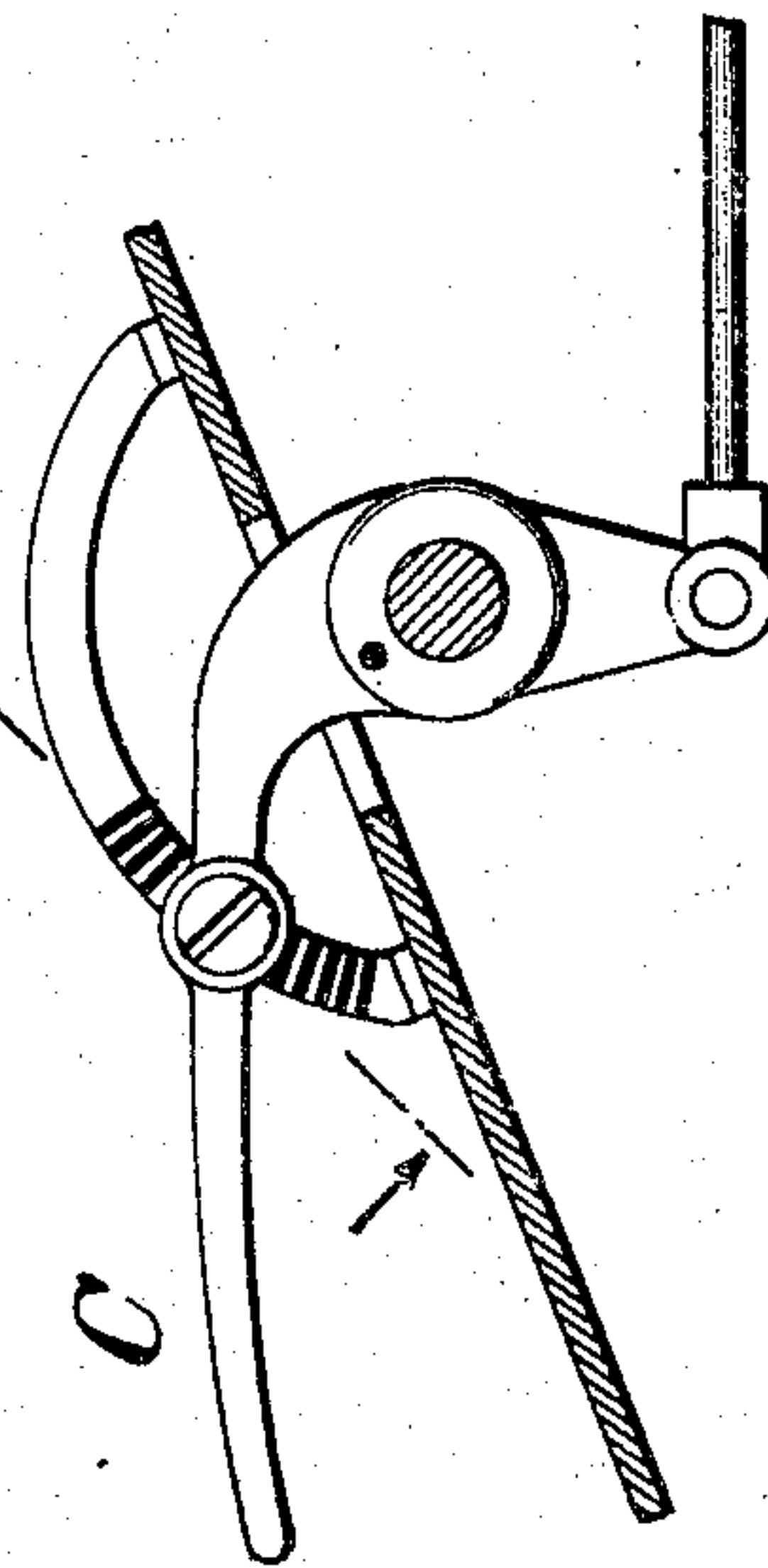
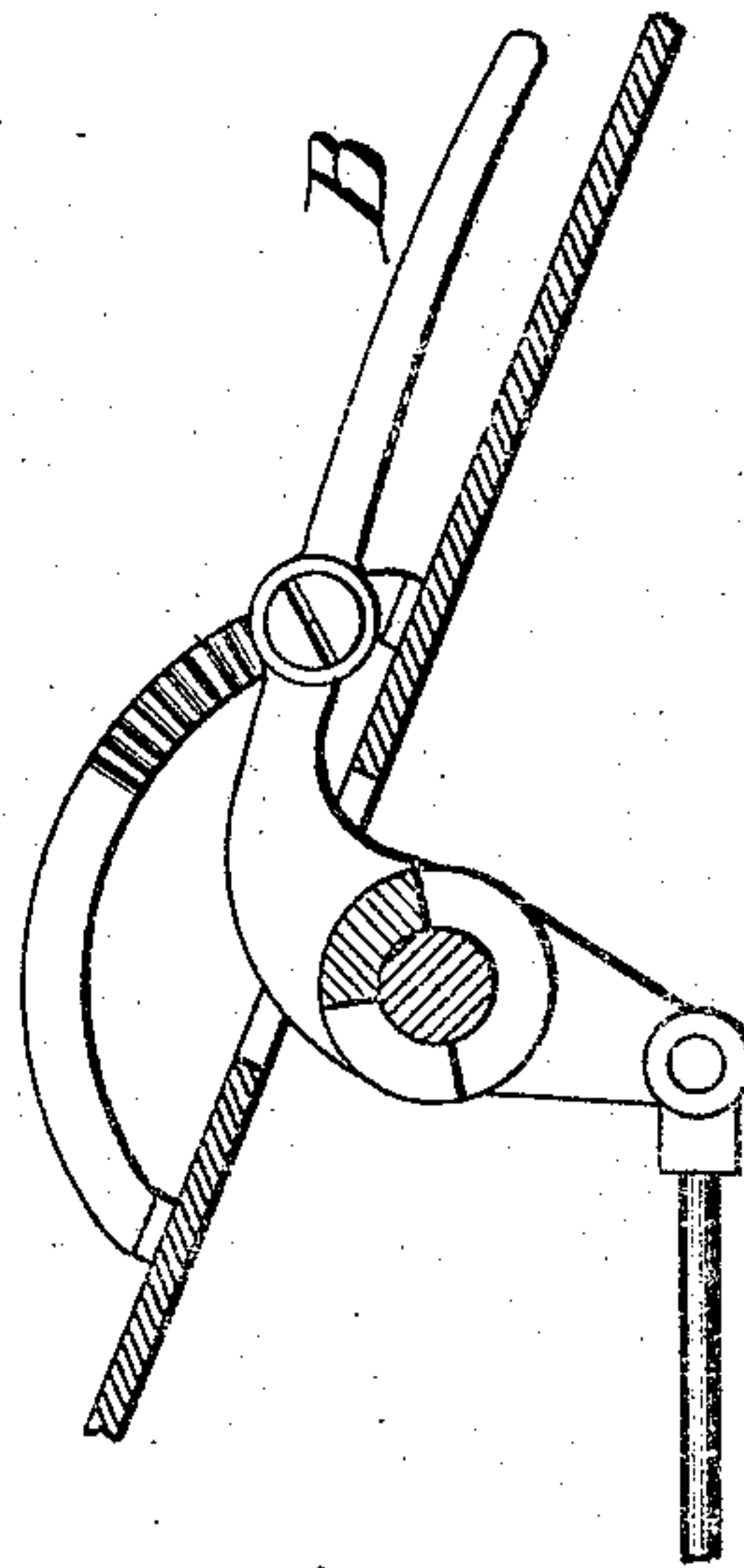


Fig. II,
Fig. IV,



WITNESSES:

E. D. Kessler
James L. Norris, Jr.
Fig. III,

INVENTOR

Edward N. Dickerson

BY

James L. Norris
ATTORNEY

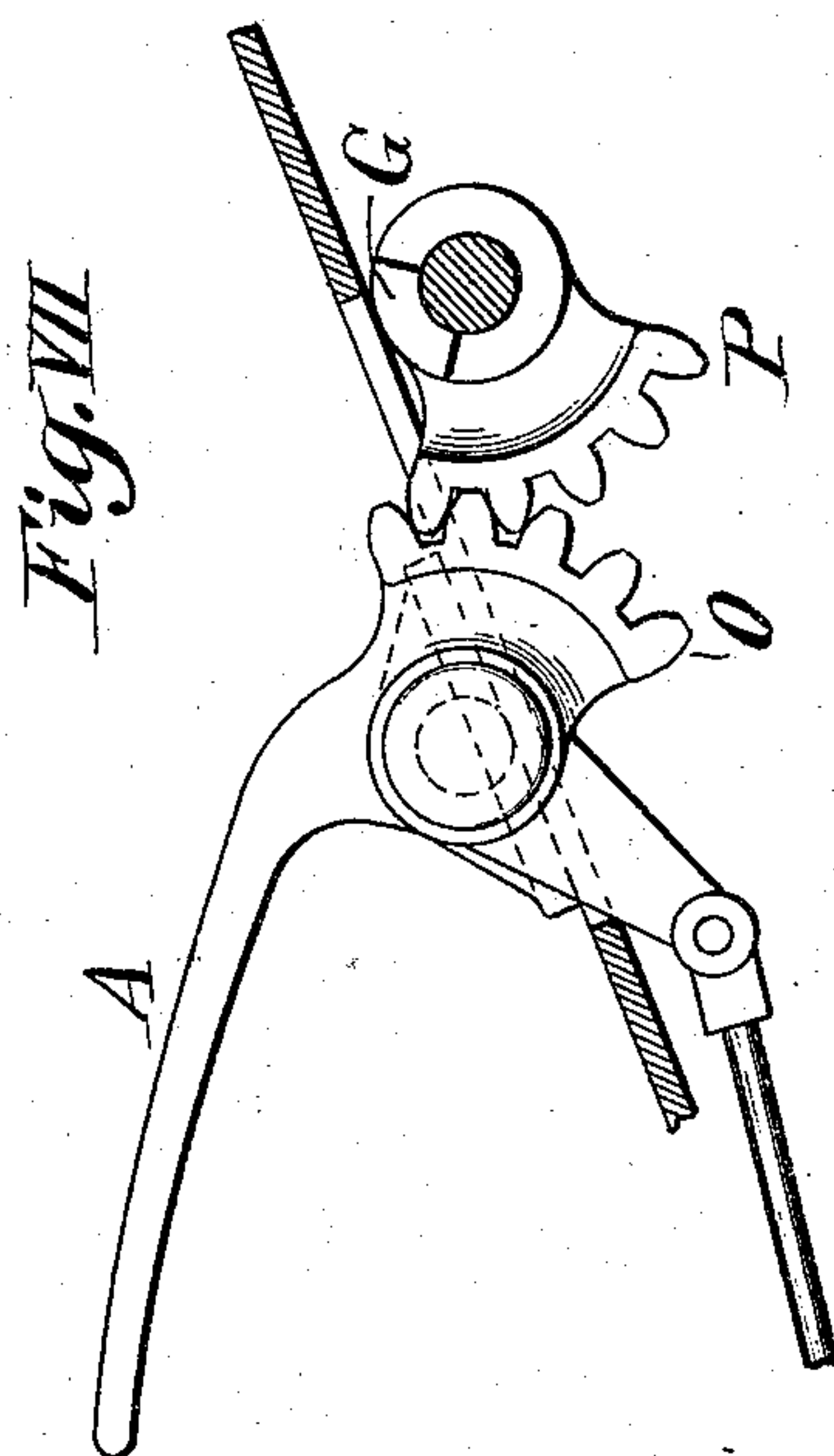
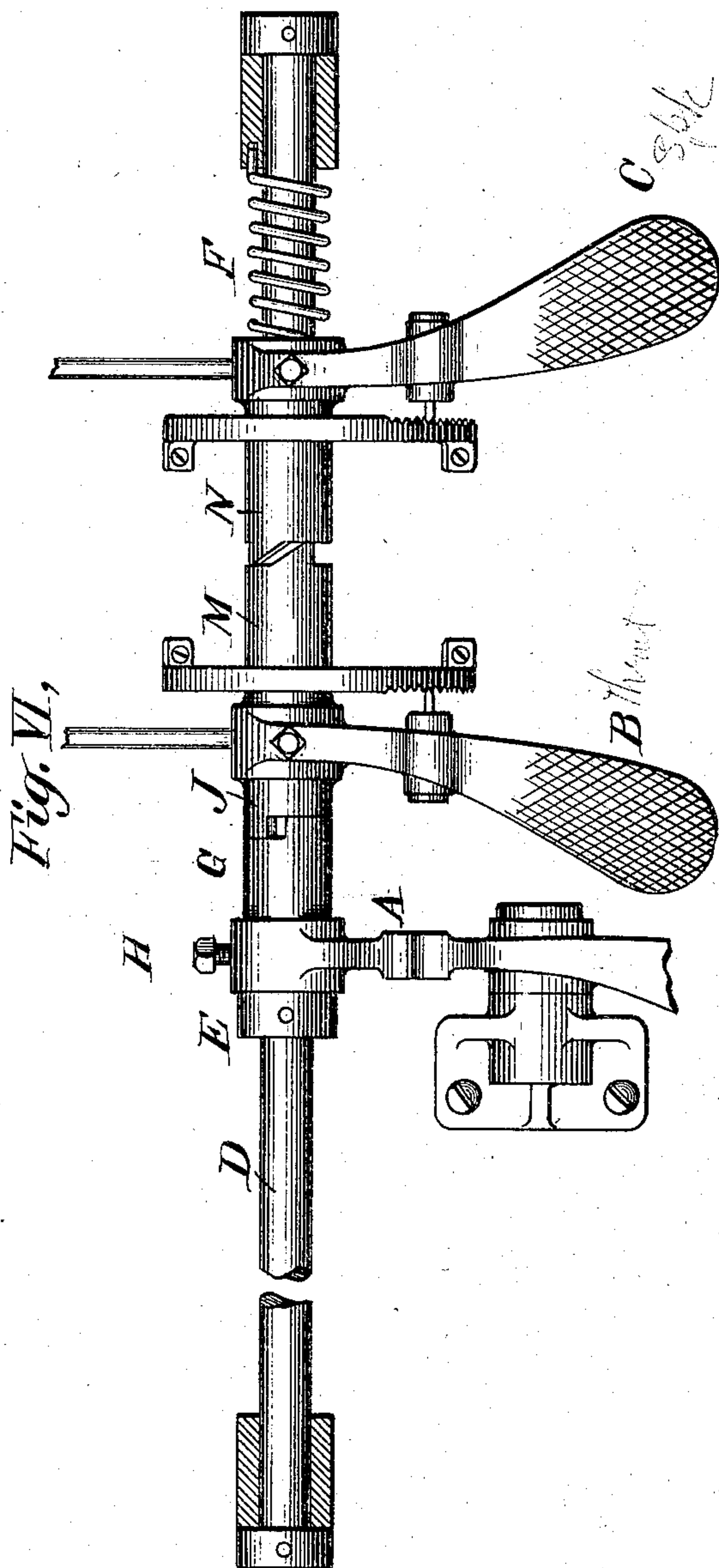
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3 SHEETS—SHEET 3.



WITNESSES:

C. H. Kessler
James L. Norris, Jr.

INVENTOR

Edward N. Dickerson

BY

James L. Norris
ATTORNEY

UNITED STATES PATENT OFFICE.

EDWARD N. DICKERSON, OF STOVALL, NORTH CAROLINA.

CONTROLLER FOR AUTOMOBILES.

SPECIFICATION forming part of Letters Patent No. 782,548, dated February 14, 1905.

Application filed November 1, 1904. Serial No. 230,926.

To all whom it may concern:

Be it known that I, EDWARD N. DICKERSON, a citizen of the United States, residing in Stovall, Granville county, North Carolina, have invented certain new and useful Improvements in Automobile Control, of which the following is a specification.

This invention relates to a new and improved system of automobile control, of which the following is a full, true, and exact description, reference being had to the accompanying drawings, of which—

Figure 1 represents an elevation of the front part of an automobile, showing the arrangement of my apparatus; Fig. 2, a plan view of the simplest form of my apparatus; Fig. 3, a detail of the locking device used on the levers; Fig. 4, a side view of the spark-advance pedal in middle position; Fig. 5, a side view of the accelerating pedal in lowest position; Fig. 6, a view of modification in which the motion of the brake-pedal on the rest of the mechanism is reversed, and Fig. 7 a side view of the motion-reversing mechanism of the brake-pedal.

In automobiles as generally arranged there is a mechanism for controlling the throttle and a separate mechanism for controlling the position of the spark-timing mechanism. Generally they are arranged to be separately adjusted by hand, the result of which is that when the brake and clutch detaching pedal is depressed or the clutch-detaching pedal is operated there is a tendency in the motor to race. This is counteracted in some instances by the use of a governor controlling the spark or the throttle. By my invention I have so connected the release-pedal, which may also operate the brake, as that on its depression the throttle is automatically closed to the desired position and the spark also set back, while the amount of such slowing of the spark and closing of the throttle can be adjusted at will. At the same time when the car is running, the position of the throttle and spark-reverse can be controlled at will by the operator. My mechanism can be arranged in many ways for accomplishing the same result; but, as shown, the release, the throttle, and spark-control levers are shown pivoted upon the same horizontal rod.

In my drawings, A represents the release-pedal, which may also operate a brake; B, the throttle-control pedal, and C the spark-control. They may be all pivoted on the same fixed shaft D. E represents a collar holding the parts in position against the tension of the spring F. The release-pedal A is provided with a toothed collar G, the position of which can be adjusted and determined by the set-screw H. This toothed collar engages with a corresponding tooth J on the throttle-pedal B, and the position of this pedal, as well as the pedal C, may be impositively locked by means of the pins K K' acting against the notched sectors L L. The pedal B is provided with the adjustable collar M, the position of which may be determined with relation to the pedal by the lock-nut N. This collar M has a slanting tooth, which engages, with a collar N, part of the pedal C, the engagement of these slanting teeth forcing the pedal C sidewise against the spring F.

In the form shown in Figs. 1 and 2 the release-pedal is moved forward and upward by the foot, whereas the pedals B and C are supposed to be adjusted downward in order to open the throttle or advance the spark. The operation of the device shown in Figs. 6 and 7 is the same, excepting that in this case the pedal A is depressed, and acting through the gears O P the sleeve G is operated in the same direction, as is shown in Fig. 2.

The operation of my device can now be readily understood. Assuming the car to be running, the pedal A, Fig. 1, is thrown forward, and the collar G engages with the tooth J, which moves the pedal B upward to the point at which the throttle is cut down to the desired point. At the same time the upward motion of the pedal B causes, by means of the slanting teeth M N, the pedal C to move to one side until the locking-pin K' is disengaged from the ratchet or sector L, when the spring F throws the pedal C upward and retards the spark to the desired point. On releasing the release-pedal A, however, the pedals B and C are not automatically returned to their former positions; but B and C are returned by the foot of the operator to the positions desired in determining the speed of the vehicle. Both

B and C are therefore set independently of the position of A and C, and C likewise can be set independently of the position of B:

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a motor-car mechanism, the combination of a release-pedal and a throttle, and mechanism by which the operation of the release-pedal closes the throttle and allows the throttle to be independently set when the release-pedal engages the motor with the transmission mechanism of the car, substantially as described.

2. The combination in a motor-car, of a release-pedal, a throttle mechanism and spark-advancing mechanism and intermediate mechanism whereby the operation of the release-pedal in releasing the mechanism will simultaneously cut down the throttle and slow the spark, while allowing of the independent adjustment of the spark and throttle when the release-pedal is not operated, substantially as described.

3. In a motor-car mechanism, the combination of a release-pedal and a throttle, and mechanism by which the operation of the release-pedal closes the throttle, to a determined adjustable amount and allows the throttle to be independently set when the release-pedal engages the motor with the transmission mechanism of the car, substantially as described.

4. The combination in a motor-car, of a release-pedal, a throttle mechanism and spark-advancing mechanism and intermediate mechanism, whereby the operation of the release-pedal in releasing the mechanism will simultaneously cut down the throttle and slow the spark, while allowing of the independent adjustment of the spark and throttle when the release-pedal is not operated, and adjustable

mechanism for determining the amount of the throttling of the engine and the slowing of the spark when the release-pedal is operated, substantially as described.

5. The combination in a motor-car mechanism, of a release-pedal, a throttling-pedal and a spark-adjusting pedal operating upon the same rod and mechanism connecting the release-pedal and the throttle-pedal whereby the throttle-pedal can be independently adjusted when the motor is in engagement, while the throttle is shut off when the release-pedal engages the mechanism, and mechanism connecting the throttle-pedal and the spark-pedal which automatically retards the spark when the throttle is shut down, substantially as described.

6. The combination in a motor-car mechanism, of throttle-pedal B and spark-pedal C, a spring F, and mechanism for compressing said spring thereby releasing the spark-pedal C when the throttle-pedal B is elevated, substantially as described.

7. The combination of the release-pedal A having adjustable sleeve G, throttle-pedal B provided with a tooth engaging with sleeve G and with locking-pin K and with adjustable sleeve M and the spark-pedal C provided with locking-pin K' spring F and mechanism between the pedals B and C for compressing spring F and releasing the pedal C when pedal B is raised, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

EDWARD N. DICKERSON.

Witnesses:

GEO. W. JAEKEL,
OLIN A. FOSTER.