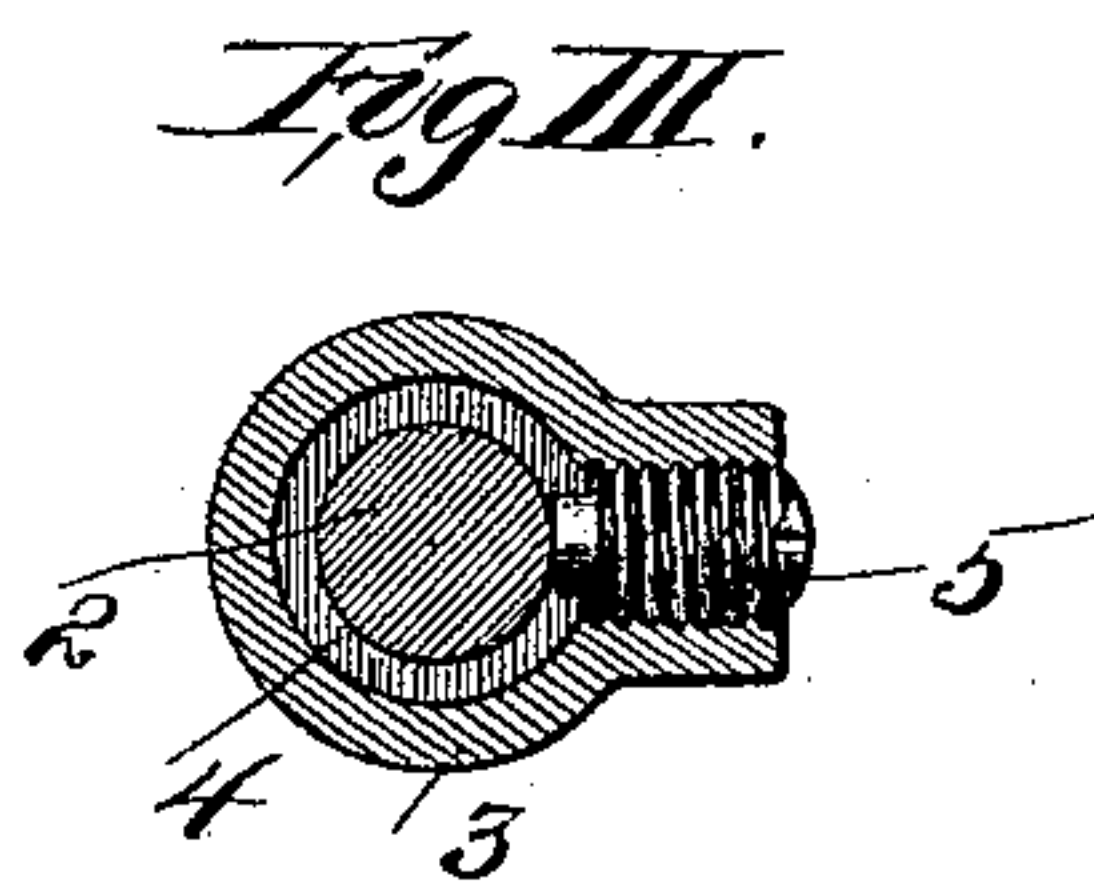
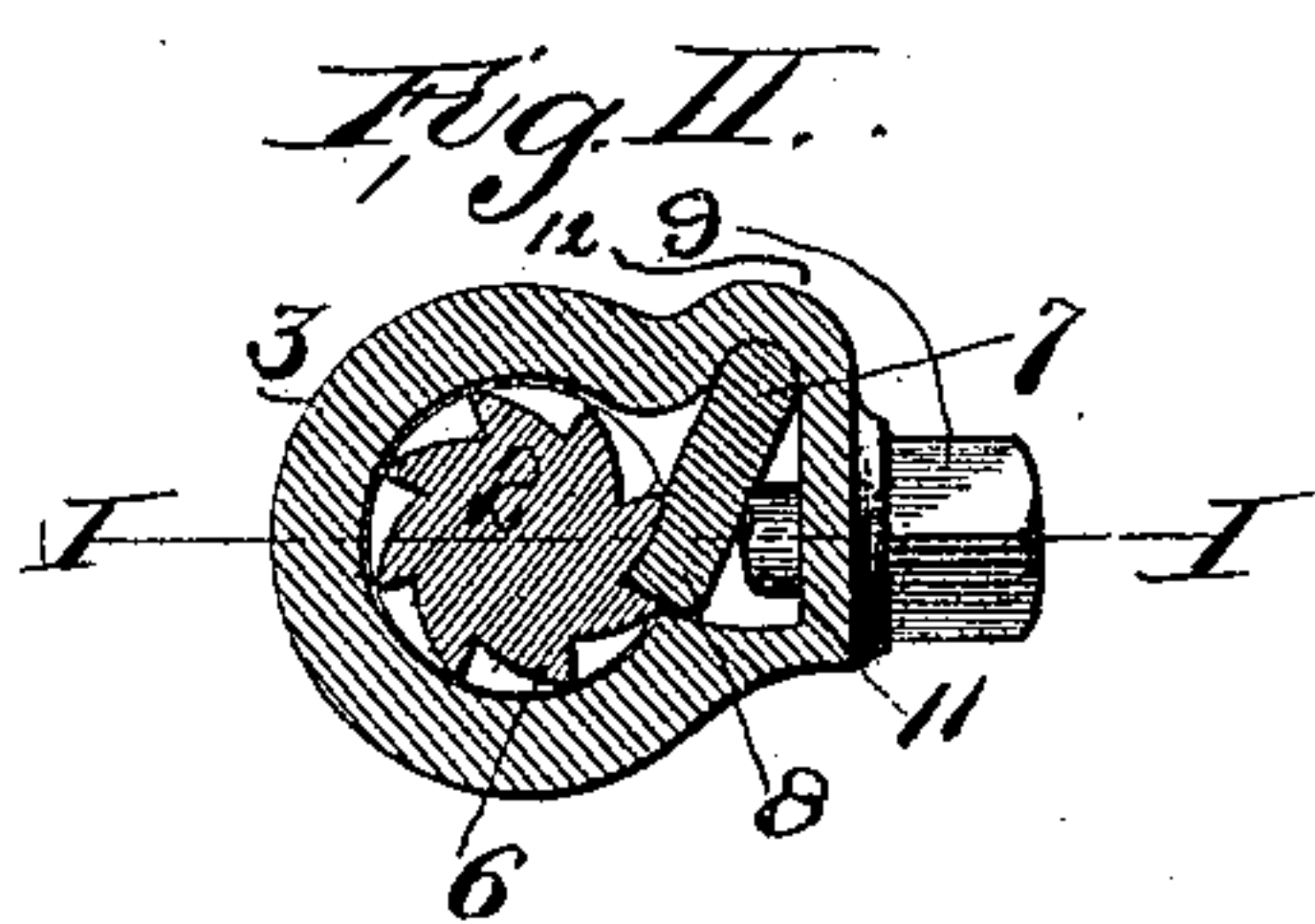
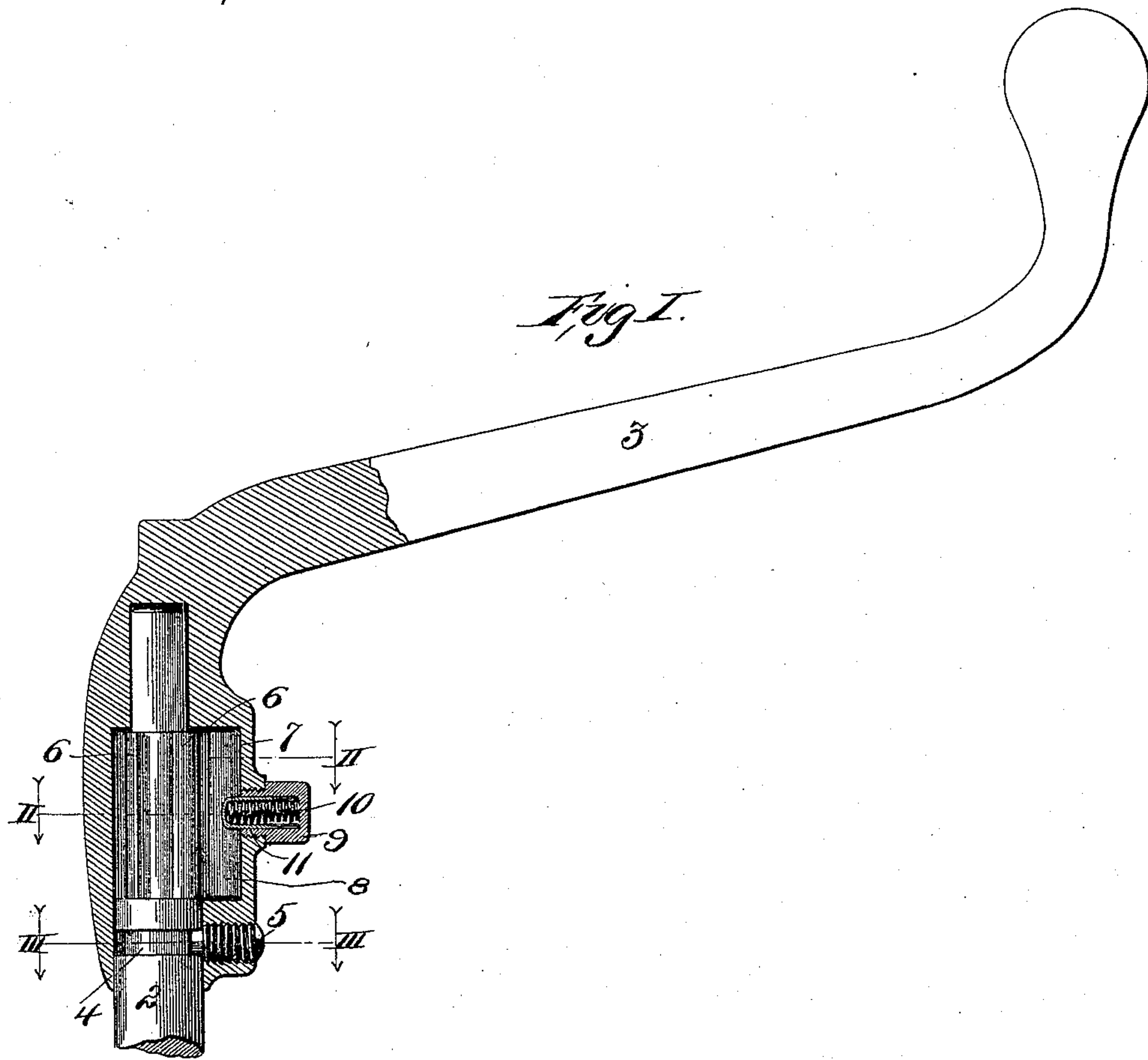


(No Model.)

P. M. KLING.  
RATCHET BRAKE FOR CARS.

No. 485,548.

Patented Nov. 1, 1892.



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# UNITED STATES PATENT OFFICE.

PETER M. KLING, OF ST. LOUIS, MISSOURI.

## RATCHET-BRAKE FOR CARS.

SPECIFICATION forming part of Letters Patent No. 485,548, dated November 1, 1892.

Application filed July 6, 1892. Serial No. 439,157. (No model.)

*To all whom it may concern:*

Be it known that I, PETER M. KLING, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Ratchet-Brakes, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to a ratchet-brake for street-cars; and it consists in features of novelty hereinafter fully described, and pointed out in the claims.

Figure I is a view, part in elevation and part in vertical section, taken on line I I, Fig. II. Fig. II is a transverse section taken on line II II, Fig. I, looking in the direction of the arrows. Fig. III is a similar view taken on line III III, Fig. I.

Referring to the drawings, 2 represents the usual vertical brake-rod of a street-car.

3 represents the handle of the brake, which is socketed to fit over the upper end of the brake-rod. The rod is provided with a groove 4 to receive the inner end of a pin 5, which passes through the socket end of the handle. The pin permits the handle to turn on the rod, but prevents its vertical movement. The upper end of the rod is provided with a number of elongated teeth 6.

7 represents a block fitting in an enlargement of the handle, the heel 8 of the block having a bearing at 12 in the socket of the

handle. The forward end bears against the ratchet-teeth, as shown clearly in Fig. II.

9 represents a hollow plug screwed into an opening in the socket end of the handle and which receives a spring 10.

11 represents a cap fitting over the inner end of the spring and which bears against the block 8 and keeps the free end of the block into engagement with the ratchet-teeth.

A ratchet-handle thus made is cheap and reliable, is very strong, and is not likely to get out of order.

I claim as my invention—

1. In a ratchet-brake, the combination of the brake-rod having elongated ratchet-teeth, a handle having a socket end with an enlarged recess, a block fitting in the recess of the handle and having a bearing at 12, a hollow plug fitting in the handle, and a spring in said plug for forcing the block into engagement with the ratchet-teeth, substantially as set forth.

2. In a ratchet-brake, the combination of the brake-rod having elongated ratchet-teeth, a socketed handle having a recess, a block in said recess having a bearing 12, a hollow plug fitting in the handle, a spring fitting in said plug, and a cap fitting over the spring, substantially as and for the purpose set forth.

PETER M. KLING.

In presence of—

ALBERT M. EBERSOLE,  
ED. S. KNIGHT.