

(No Model.)

S. W. BARR.
STORE SERVICE APPARATUS.

No. 413,481.

Patented Oct. 22, 1889.

FIG. I-

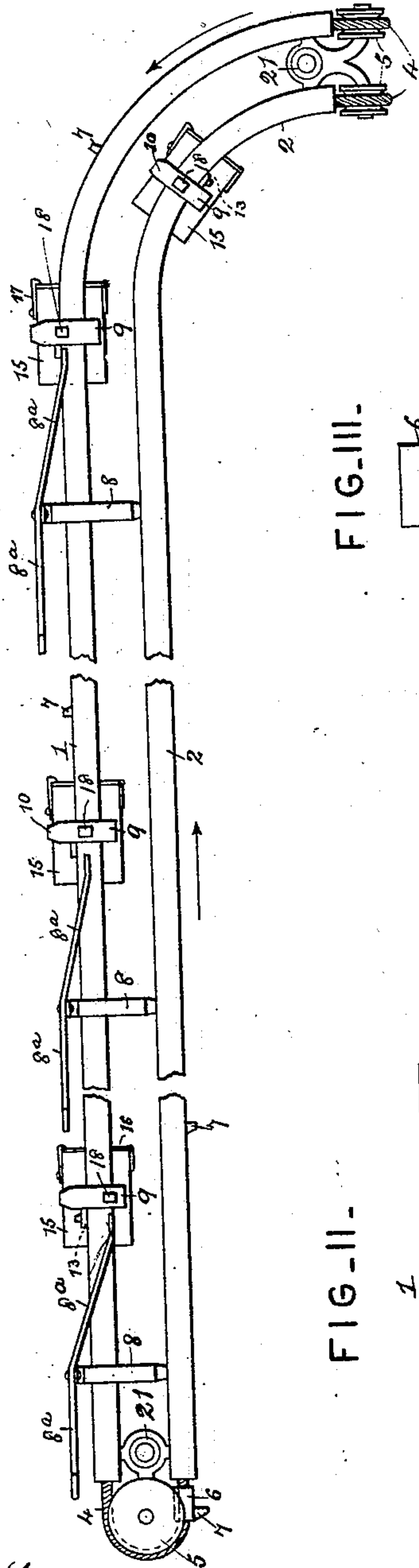


FIG. III-

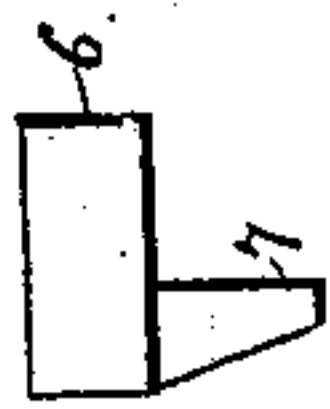


FIG. II-



FIG. VI-

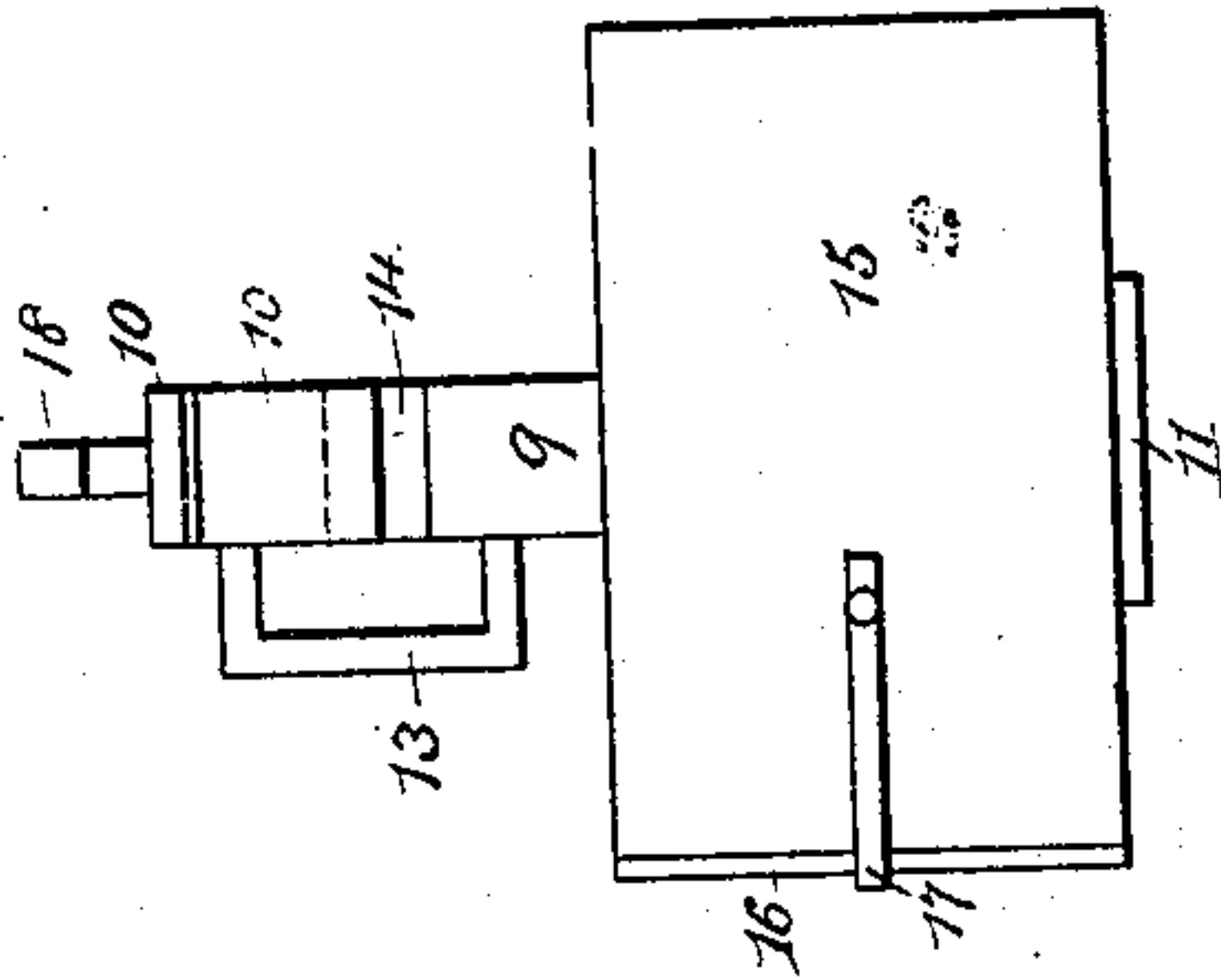


FIG. V-

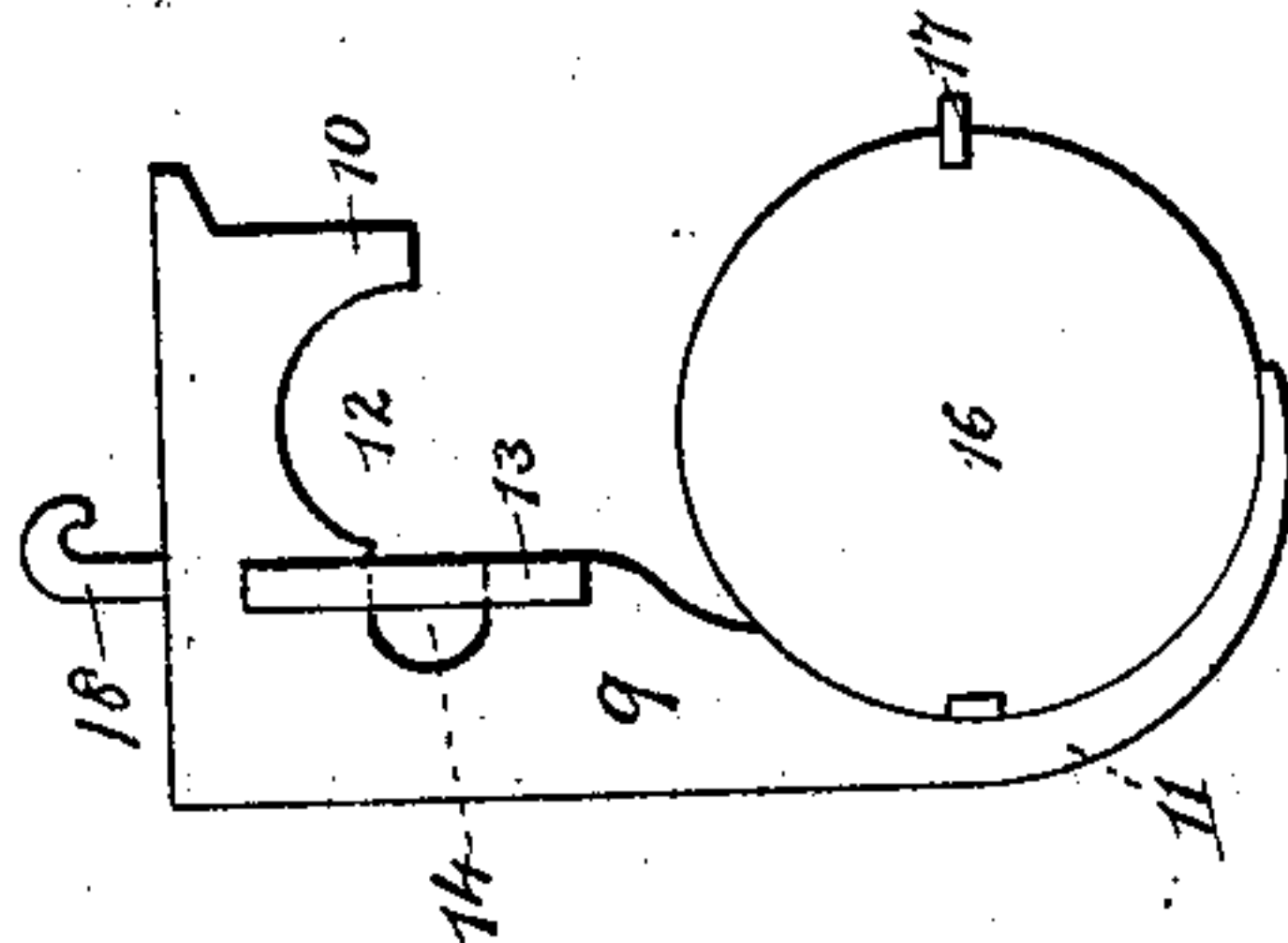
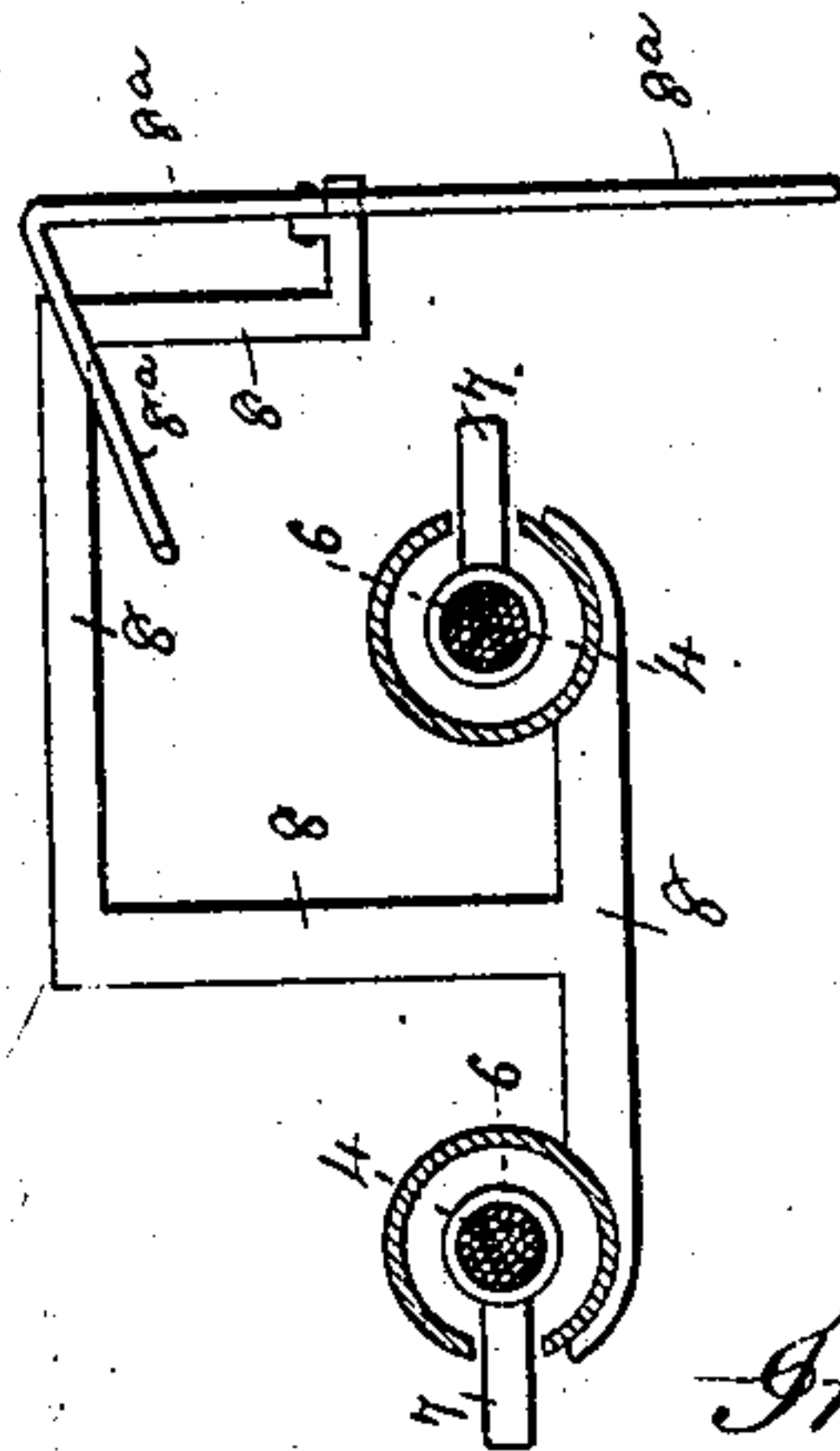


FIG. IV-



Attest:

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UNITED STATES PATENT OFFICE.

SAMUEL W. BARR, OF MANSFIELD, OHIO.

STORE-SERVICE APPARATUS.

SPECIFICATION forming part of Letters Patent No. 413,481, dated October 22, 1889.

Application filed July 16, 1889. Serial No. 317,699. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL W. BARR, a citizen of the United States, and a resident of Mansfield, in the county of Richland and State of Ohio, have invented new and useful Improvements in Store-Service Apparatus, of which the following is a specification.

The object of my invention is to furnish a simple store-service apparatus which will not occupy much room and at the same time be rapid and adapted to run around curves.

My invention relates to that class of store-service apparatus in which a traveling cable is employed to convey the carriers; and my improvement consists in the construction of parts, as hereinafter described, and pointed out in the claims.

In order that my invention may be fully understood, I will proceed to describe it with reference to the accompanying drawings, in which—

Figure I is a plan view of my improved store-service apparatus. Fig. II is a side elevation of a portion of the tube of the cable-way. Fig. III is a plan view of a cable-thimble. Fig. IV is a transverse section of the cable-way, showing a side elevation of the switch-support. Fig. V is an end elevation of a carrier. Fig. VI is a front elevation thereof.

The cable-way is supported on suitable standards or brackets 21, and consists of a pair of tubes 1 2, having continuous narrow openings or slits 3 in the sides, as shown in Fig. II.

4 is a rapidly-moving cord or cable running through the tubes and working around pulleys 5. This cord or cable is provided with thimbles 6 at suitable distances apart, having horizontal sprockets or projections 7 working through the openings or slits for impelling the carriers which slide on the tubes. Secured to the bottom of the way and projecting upwardly between the tubes is a bracket 8, having a switch 8^a, the bracket and switch being similar to that shown and described in my application Serial No. 305,950, filed April 4, 1889.

9 is a carrier-frame having an overhang-

ing arm 10 and a lower arm 11. The overhanging arm is formed with a semicircular opening 12, conforming in size to the upper half of the tubes on which the carrier slides. At one side of this opening, in front of the frame, is a loop or bar 13, and in the frame at the rear of said loop or bar 13 is a groove or recess 14. The sprockets or projections on the cable enter the groove or recess and engage the loop or bar to propel the carrier. On the lower arm 11 is secured a circular box 15, having an end door 16 hinged thereto and held closed by a spring-catch 17.

18 is a switch staple or hook secured to the overhanging arm of the carrier-frame.

Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent—

1. The combination of the cable-way consisting of a pair of tubes 1 and 2, having continuous narrow openings or slits 3 in the sides thereof, a cable 4, provided with thimbles 6, having horizontal sprockets or projections 7 working through the openings or slits, and a carrier having a frame 9, provided with an overhanging arm 10, formed with a semicircular opening 12, conforming to the tubes to adapt the carrier to slide on the latter, substantially as described.

2. The combination of the cable-way consisting of a pair of tubes 1 and 2, having continuous narrow openings or slits 3 in the sides thereof, a cable 4, provided with thimbles 6, having horizontal sprockets or projections 7 working through the openings or slits, and a carrier formed with a frame 9, an overhanging arm 10, having semicircular opening 12, a groove or recess 14, and a loop or bar 13 in front of the groove or recess, substantially as described.

3. A carrier constructed with a frame 9, overhanging arm 10, opening 12, groove or recess 14, and loop or bar 13, substantially as described.

SAMUEL W. BARR.

Witnesses:

I. S. DONNELL,
SAML. MARRIOTT,