C. P. RUGGLES.

SIGNAL.

APPLICATION FILED JUNE 27, 1908.

950,867. Patented Mar. 1, 1910.

Fig. 1.

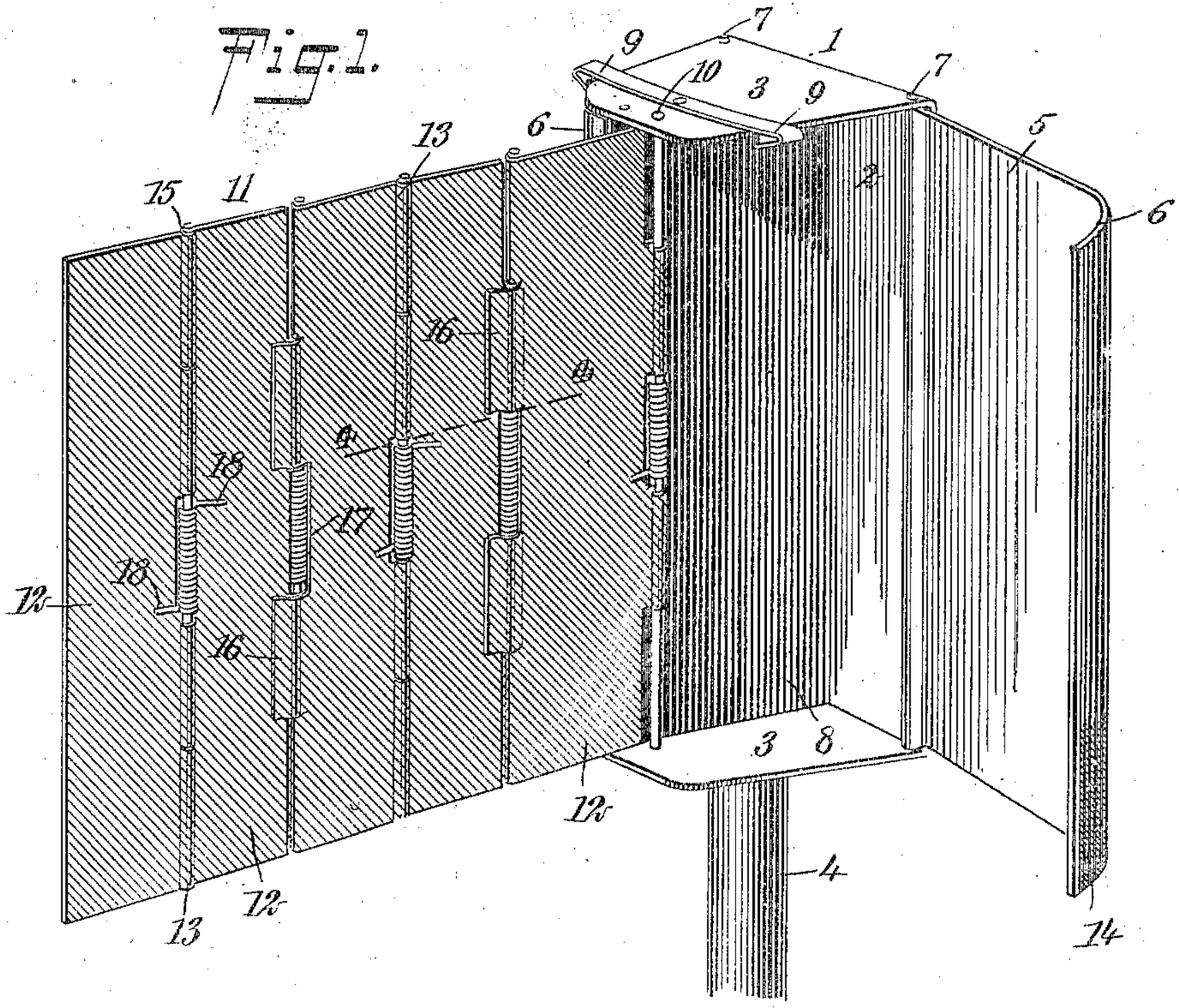



Fig. 2.

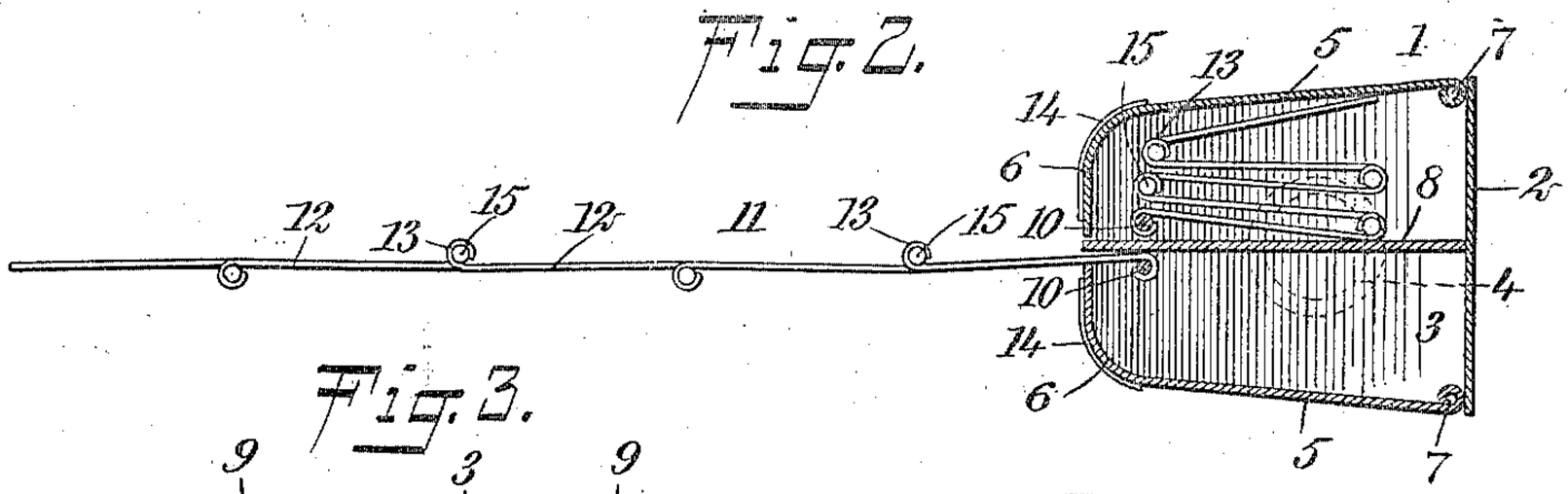



Fig. 3.

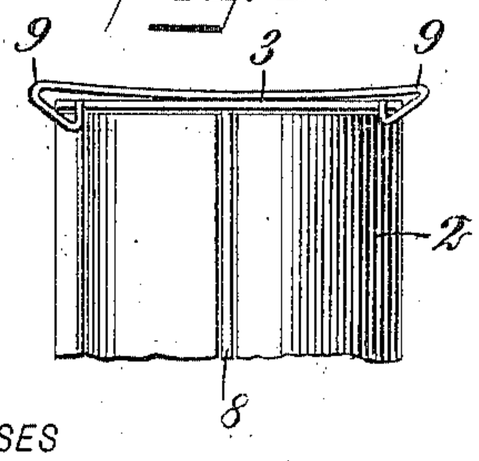
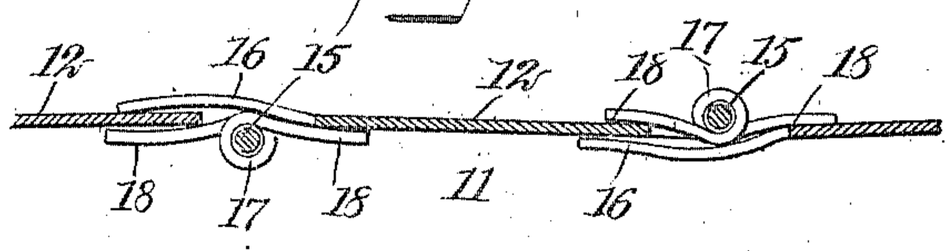



Fig. 4.




WITNESSES

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# UNITED STATES PATENT OFFICE.

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## SIGNAL.

950,867. Specification of Letters Patent. **Patented Mar. 1, 1910.**

Application filed June 27, 1908. Serial No. 440,631.

*To all whom it may concern:*

Be it known that I, CLIFTON P. RUGGLES, a citizen of the United States, and a resident of Sedalia, in the county of Pettis and State of Missouri, have invented a new and Improved Signal, of which the following is a full, clear, and exact description.

This invention relates to signals, and more particularly such as are adapted to be used in connection with the operation of railroads, and which consist of casings having compartments, and spring actuated, sectional targets arranged within the compartments, the former being adapted to assume an extended position for display when released from the compartments.

The object of the invention is to provide signals, inexpensive to manufacture and simple in construction, which have signal targets normally held within a closed casing, from which they can be released and automatically projected for the purposes of display when desired.

The invention consists in the construction and combination of parts to be more fully described hereinafter and particularly set forth in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a perspective view of the device, showing one of the targets in an extended position, one of the doors of the casing being open; Fig. 2 is an enlarged cross section of the same, both of the doors of the casing being closed; Fig. 3 is an enlarged elevation showing the spring catches employed for locking the doors of the casing; and Fig. 4 is an enlarged cross section on the line 4—4 of Fig. 1.

Before proceeding to a more detailed description of my invention, it should be understood that I provide a signal adapted to be used in connection with railroads. It is especially intended to be mounted on the engine or the last car of a train, and may have either one or more compartments for carrying targets of different color or form. The targets themselves are each constructed of a number of spring controlled sections, adapted to assume an alined position when released from the compartments in which they are normally held completely to conceal them.

Referring more completely to the drawings, I provide a casing 1, having a back 2, the ends 3 of which are laterally bent to form the top and bottom of the casing. A stem 4 of any suitable shape, is provided for mounting the signal in position. Pivotally arranged on rods 7 between the top and bottom of the casing and adjacent to the back 2, are doors 5, having their outer edge portions 6 inwardly curved.

As shown most clearly in the drawings, a partition 8 extends from the back 2 of the casing between the ends 3, and divides the casing into compartments. Spring catches 9, formed of a resilient strip of metal, secured to the top 3 of the casing, serve to engage the doors 5 to lock the latter in a closed position. Pivotally arranged on supports 10 between the top and bottom of the casing at the forward ends thereof, are targets 11, each consisting of a plurality of sections 12. The sections have extensions bent upon themselves to provide registering hinge sleeves 13, through which pivot pins 15 extend, as shown most clearly in Figs. 1 and 2. Each section, with the exception of the outer end sections, has projections 16 adapted to engage at one of the faces of an adjacent section to hold the sections in alinement. Adjacent plates are engaged at opposite sides by the projections 16, as is shown most clearly in Fig. 4.

Helical springs 17 are arranged on the pivot pins 15 between the sections in cut away portions of the latter, and have their ends 18 oppositely disposed and resting upon the adjacent sections. When the targets are folded, the sections lie in juxtaposition. When released from this position, the springs tend to move the sections into alinement with respect to one another, the projections 16 presenting a backing to limit the movement of the sections and to hold them in one plane. The ends of the springs adjacent to the partition 8 abut thereagainst to maintain the targets in extended positions. The arrangement is such that the extended targets can project between the partition 8 and the free edges of the doors, even when the latter are closed.

Markers 14 of different colors are provided on the doors of the casing to indicate

what color of target is carried in each compartment.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:—

1. In a device of the class described, a casing, a spring controlled target hinged to the casing and formed of rectangular plates of rigid material hinged together at their longitudinal edges to extend in alinement from the casing or to fold one upon the other in said casing, said target being normally held in a folded position in the casing.

2. In a device of the class described, a casing, a hinged and spring actuated target carried by the casing and formed of rectangular sections hinged together at one edge to extend in alinement from the casing or to fold one upon the other in said casing, and a door for the casing and with which the target is in engagement when within the casing.

3. In a device of the class described, a casing, a target pivotally arranged within said casing, said target consisting of a plurality of sections pivotally connected one to another, resilient means for directly holding said sections in alinement with one another, and means for securing said target in folded position within the casing.

4. In a device of the class described, a casing having a hinged door, a target pivotally arranged in said casing, said target consisting of a plurality of hinged sections, resilient means for normally holding said sections in extended and alined position, each section having a projection to engage an adjacent section, whereby each section is held against movement in one direction relative to an adjacent section, and locking means for securing said door of the casing.

5. In a device of the class described, a casing, a sectional target normally held in a folded position in said casing, and resilient means located between the sections of said target for holding the same extended and in alinement.

6. In a device of the class described, a casing, a sectional target normally held in a folded position within said casing, resilient means located between the sections of said target for holding the same extended, and projections on said sections for limiting the movement thereof, whereby they are held in alinement.

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

CLIFTON P. RUGGLES.

Witnesses:
H. L. PURTON.
GEO. WILHITE.