

THOMAS S. HALL.  
Improvement in Electro-Magnetic Signal Houses.  
No. 121,870  
Patented Dec. 12, 1871.

Fig. 1.

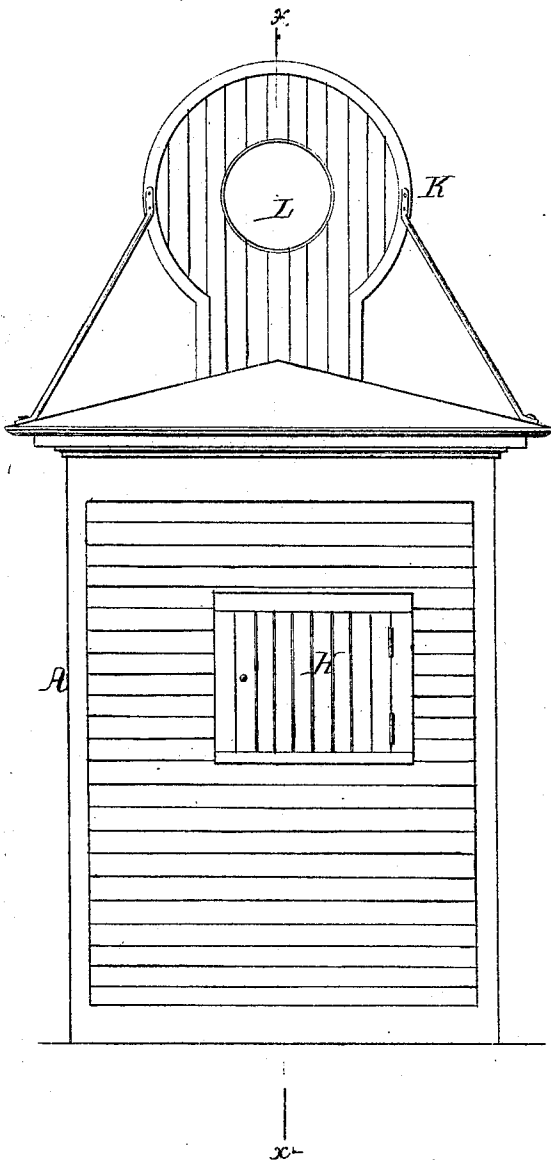


Fig. 2.

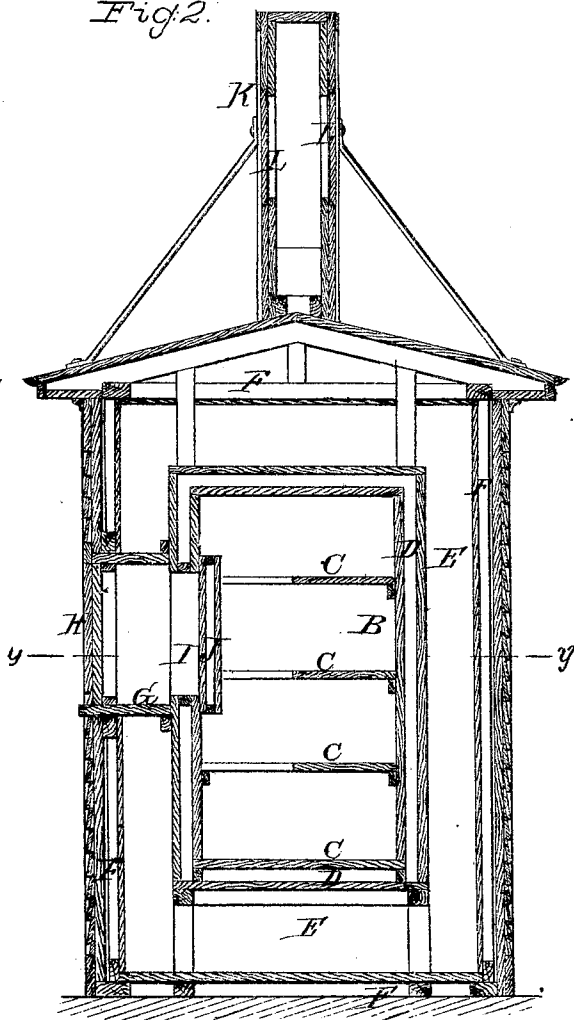
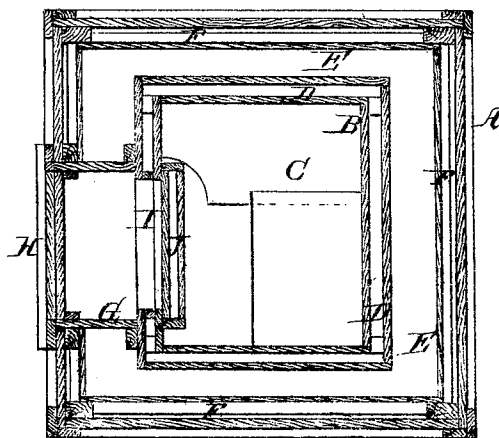


Fig. 3.



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# UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN ELECTRO-MAGNETIC SIGNAL-HOUSES.

Specification forming part of Letters Patent No. 121,870, dated December 12, 1871.

*To all whom it may concern:*

Be it known that I, THOMAS S. HALL, of West Meriden, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Electro-Magnetic Signal-Houses; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which drawing—

Figure 1 is an elevation of this improvement. Fig. 2 is a vertical section taken in the line *x x* of Fig. 1. Fig. 3 is a horizontal section in the line *y y* of Fig. 2.

Similar letters indicate corresponding parts.

This invention relates to electro-magnetic signal and battery-houses for railroads; and consists in combining, with the battery-chamber, two or more air or non-conducting chambers which surround such chamber on all sides for the purpose of protecting the battery from frost. It consists also in inclosing the signals on all sides so that they cannot be tampered with, the signal-cupola being provided with glass faces on the front and back to allow them to be seen when they have been brought into proper position, while, at the same time, the signal mechanism is effectually protected against the weather.

A designates an electro-magnetic railroad signal and battery-house, provided with a cupola, K, for containing and exhibiting a signal. Said house contains a central chamber, B, provided with a series of shelves, C, whereon the batteries of the electro-magnetic apparatus are to be placed.

The central battery-chamber is surrounded by a series of two or more separate air-chambers for the purpose of protecting the batteries in the central chamber from frost. In this example the series of air-chambers, except at top and at the door-ways, are three in number, marked, respectively, D E F. The air-chambers are made close and tight by any suitable material, such as felt or paper. C is a door-way to obtain access to the battery-chamber, and the door-way is provided with an outer door, H, and an inner door, I, the latter being a double door, containing an air-chamber, J. The outer door can be made double also, or an additional door may be provided. The cupola K rises from the top of the house, and contains the signal which is operated by the electro-magnetic apparatus. It is inclosed so as to prevent the signal contained therein from being tampered with, and is provided with glass faces L L on the front and rear, opposite the place occupied by the signal when in action; at the same time the cupola serves to protect the signal mechanism against the influence of the weather.

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

The railroad electro-magnetic signal and battery-house provided with two or more non-conducting chambers or spaces surrounding the battery-chamber and an inclosed signal-cupola, substantially as described.

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