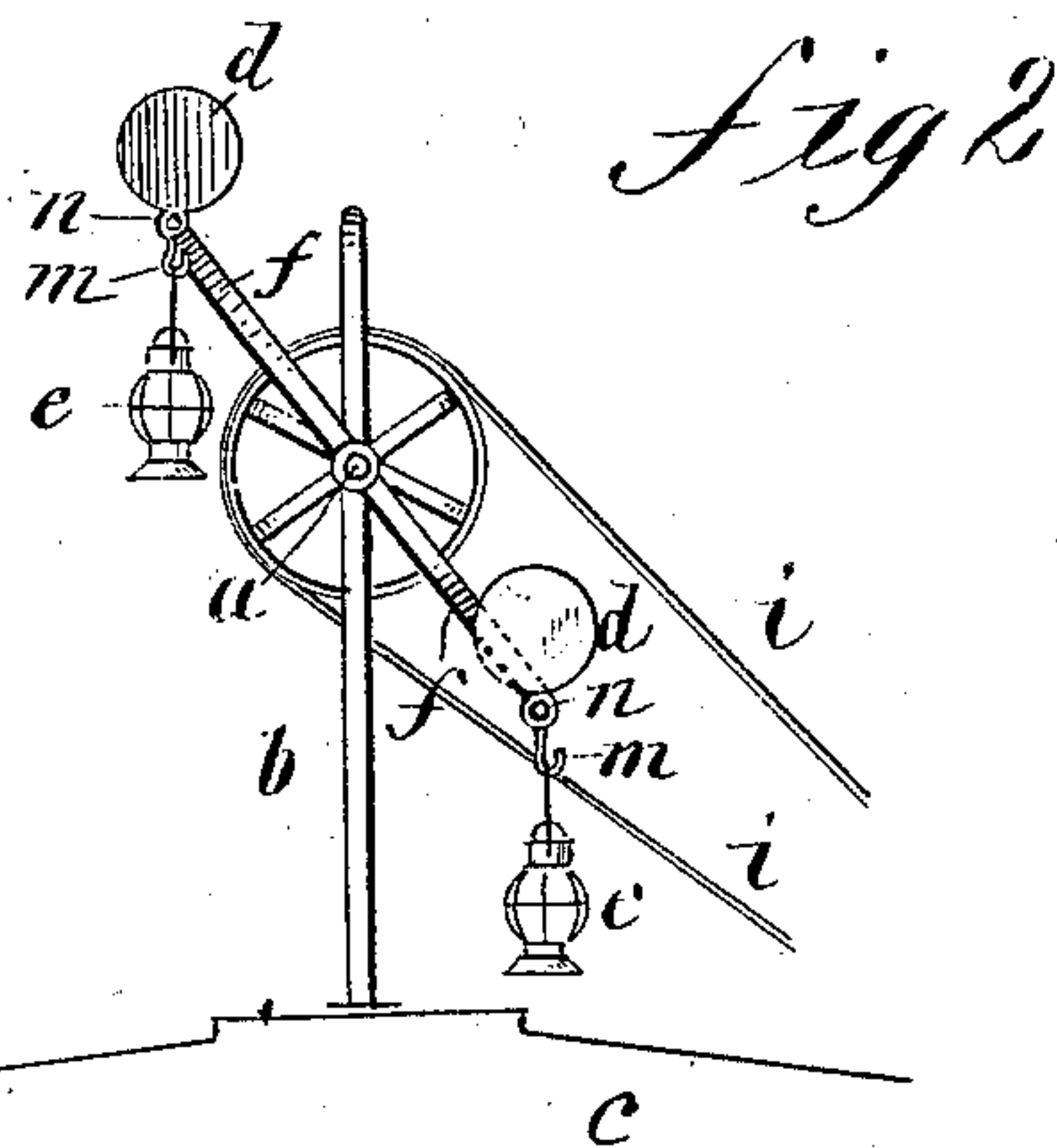
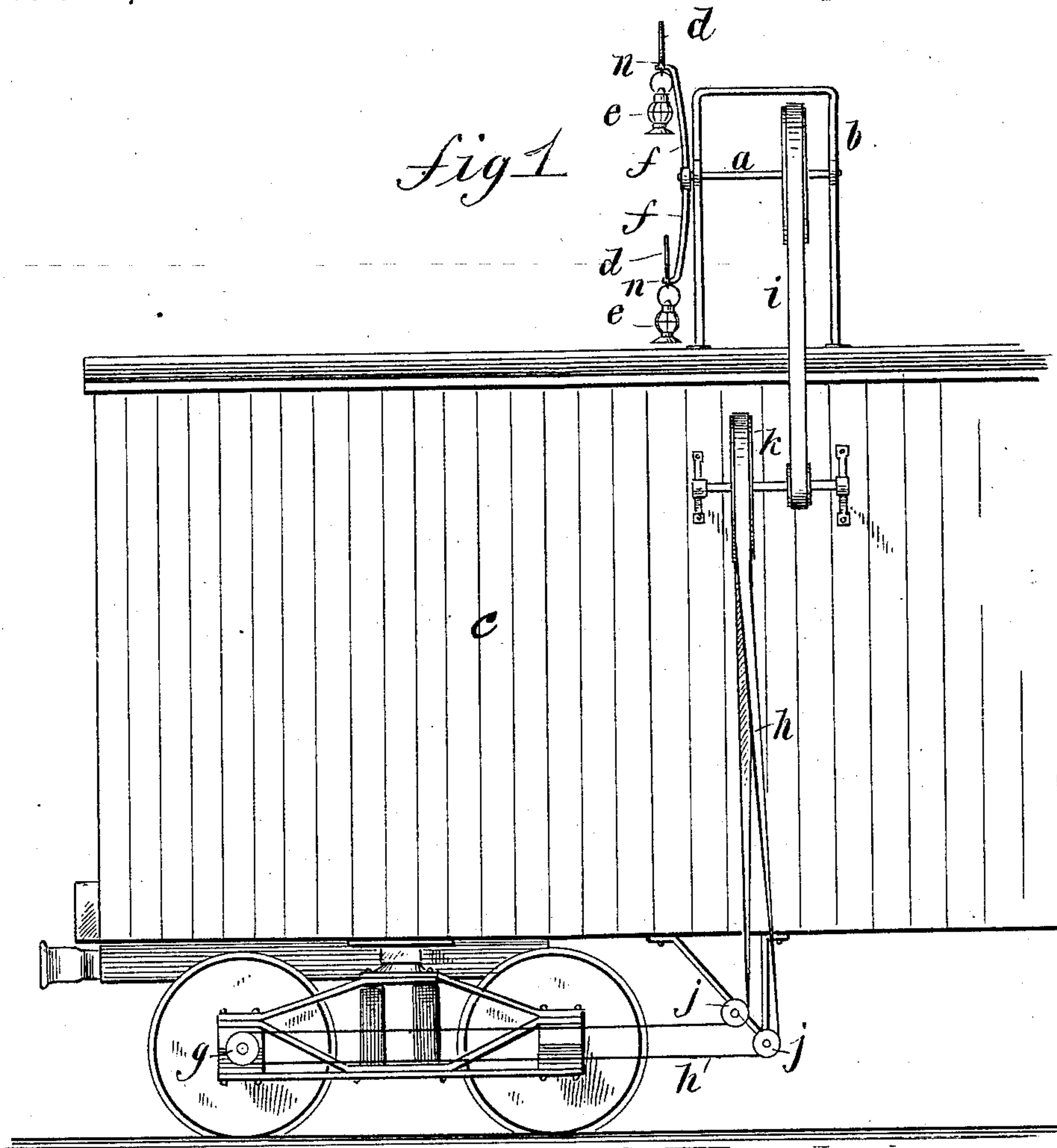


(No Model.)

I. W. STEMEN.
CAR SIGNAL.

No. 285,173.

Patented Sept. 18, 1883.



WITNESSES:

J. D. Garfield
C. Sedgwick

INVENTOR:

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ATTORNEYS.

UNITED STATES PATENT OFFICE.

ISAAC W. STEMEN, OF ELIDA, OHIO.

CAR-SIGNAL.

SPECIFICATION forming part of Letters Patent No. 285,173, dated September 18, 1883.

Application filed March 1, 1883. (No model.)

To all whom it may concern:

Be it known that I, ISAAC W. STEMEN, of Elida, in the county of Allen and State of Ohio, have invented a new and Improved Railroad-Signal, of which the following is a full, clear, and exact description.

This invention consists of a revolving signal of targets by day and lamps by night, set on the top of the caboose or other hind car, and geared by belts and pulleys with one of the axles of the car-truck, so that the direction of their rotation will show which way the train is running, and their velocity will indicate the speed of the train, and being at rest will show that the train is standing, all as hereinafter fully described.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a side elevation of a freight-car with my improved signal applied, and Fig. 2 is an end elevation of the reel on which the signals are revolved.

I arrange a short shaft, *a*, in a suitable bearing-frame, *b*, on the top of the car *c*, to carry target-signals *d* or lamps *e* on reel-arms *f*, to be revolved by suitable gearing connecting the shaft with one of the truck-axles *g*, so that the signals will show to the train-men behind whether the train is in motion or not, also which way and how fast it is running, the said shaft *a* being arranged lengthwise of the car, so that the reel-arms will swing crosswise, and the gearing consisting in this case of pulleys and belts; but cog-wheels and shafts may be employed,

if preferred. I use two belts, *h* and *i*, and the requisite pulleys for reducing the speed of the reel, so that the signals may revolve, say, ten revolutions per minute for a speed of fifteen miles of the car per hour; and in order that the belt *h* will not be affected by rise and fall of the car on the springs, I train it horizontally for a short distance from the pulley on the car-axle, and then run it over guide-pulleys *j* to the reducing-pulley *k*, mounted on the side or top of the car, near the top, from which the belt *i* runs to the shaft *a*.

The lanterns are suspended by hooks *m* from pivots *n* of the arms *f*, so that they will swing upright, and the hooks are connected to the targets, so that they swing over the lanterns.

I do not limit myself to any particular contrivance of the driving-gear, for that may be varied at will.

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

In a car-signal, a car carrying on its top a frame, *b*, the shaft *a*, supported by said frame and bearing the reel-arms *f*, the target-signals pivoted at the ends of these arms, and the signal-lights suspended from and serving to maintain the targets in vertical position by their weight, all combined with mechanism for operating the signal connected with one of the truck-axles of the car, substantially as described.

ISAAC W. STEMEN.

Witnesses:

JACOB R. BRENNEMAN,
COLUMBUS E. ENSLENS.