R. A. FILKINS.

Musical Railway Signals.

No. 141,266. Patented July 29, 1873.

Fig. 1.

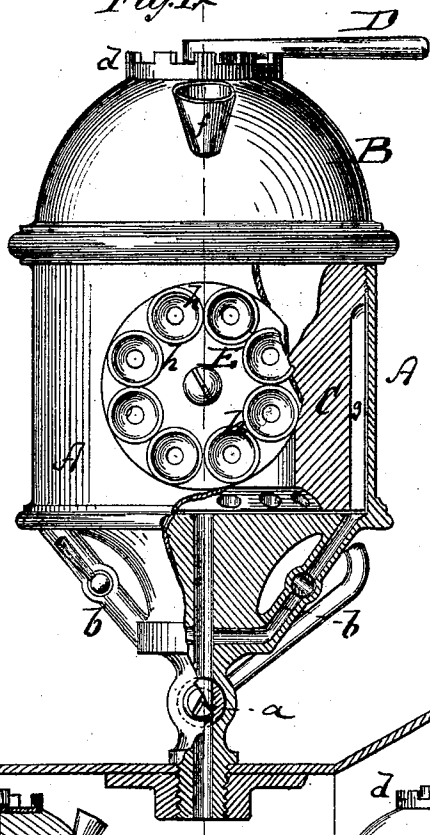


Fig. 2.

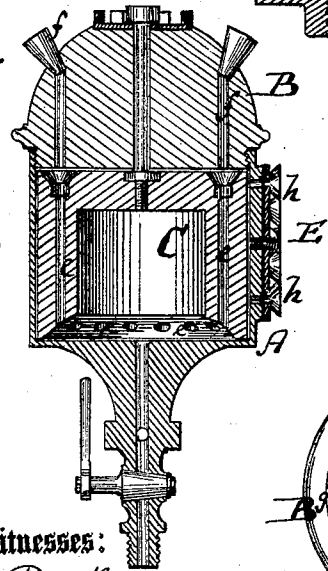


Fig. 3.

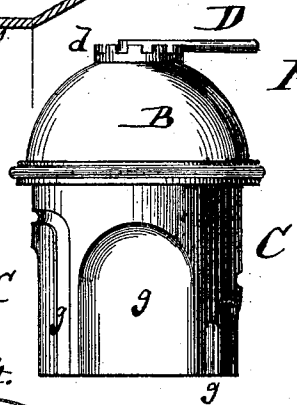
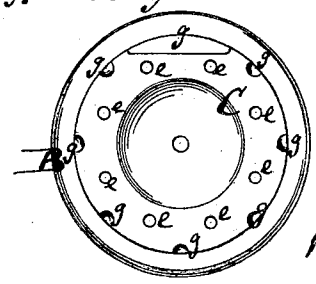


Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

REED A. FILKINS, OF CHESHIRE, ASSIGNOR TO HIMSELF AND AUGUSTUS R. TYRRELL, OF SAVOY, MASSACHUSETTS.

IMPROVEMENT IN MUSICAL RAILWAY-SIGNALS.

Specification forming part of Letters Patent No. **141,266**, dated July 29, 1873; application filed January 11, 1873.

To all whom it may concern:

Be it known that I, REED A. FILKINS, of Cheshire, in the county of Berkshire and State of Massachusetts, have invented a new and Improved Musical Railway-Signal, of which the following is a specification:

Figure 1 is a front view, partly in section, of my invention. Fig. 2 is a vertical section of the same on the line *x x*, Fig. 1. Fig. 3 is a detail side view of the inner cylinder, and Fig. 4 a bottom view of the same.

Similar letters of reference indicate corresponding parts.

The object of my invention is to avoid the disagreeable and monotonous whistling of locomotive-engines, and substitute therefor a more satisfactory method of signaling, and at the same time indicate different signals, by the combination of harmonious sounds, or by various successions of sounds. This object is accomplished by providing a series of whistles in connection with the steam-boiler of a locomotive-engine so that one or more of said whistles may be brought into action by the engineer.

In the drawing, the letter A represents the outer shell of my compound whistle, made of cylindrical shape, supported above the boiler by suitable means, and connected with the boiler by two or more steam-pipes, *a b*, which enter the lower portion of the shell. The shell A is covered or closed by a cap, B, which may be secured to it by screws or otherwise, and to which is swiveled a pendent cylinder, C, that enters the shell in the manner shown, and is so connected with a handle, D, above the cap B that it may be turned by means of said handle, which may be locked into a notched disk, *d*, or in other suitable manner. The pendent cylinder C is provided with eight, more or less, vertical whistles, *e*, through which the steam entering the shell by the pipe *a* is forced as soon as one or more of said whistles is brought in line with as many pipes, *f*, extending through the cap B.

It will be perceived that, by means of these pipes *f* and the movable arrangement described, a series and continuation of different sounds may be obtained, thereby enabling the engineer to produce any desired or prescribed set of signals by properly placing the pipes *e* under the escape-pipes *f*.

The pendent cylinder C is further supplied with grooves *g* at the sides, arranged in different widths and heights, for the purpose of supplying steam to one or more of a series of whistles, *h*, that are fastened to a circular plate, E, hanging at the outer side of the shell. The shell is perforated back of the plate E with as many apertures as there are whistles *h*, in such manner that all the whistles *h*, or any less number of them, may be supplied with steam.

It is evident that either one or the other of the two systems of steam-whistles herein described, or both, may be used on one engine; that proper valves should be applied to the steam-supply pipes, and suitable means used for turning the plate E.

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

1. The lever D, arranged in connection with the cylinder C and cap B, as specified.

2. The rotary plate E, carrying a series of steam-whistles, and applied to the shell A, as described.

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