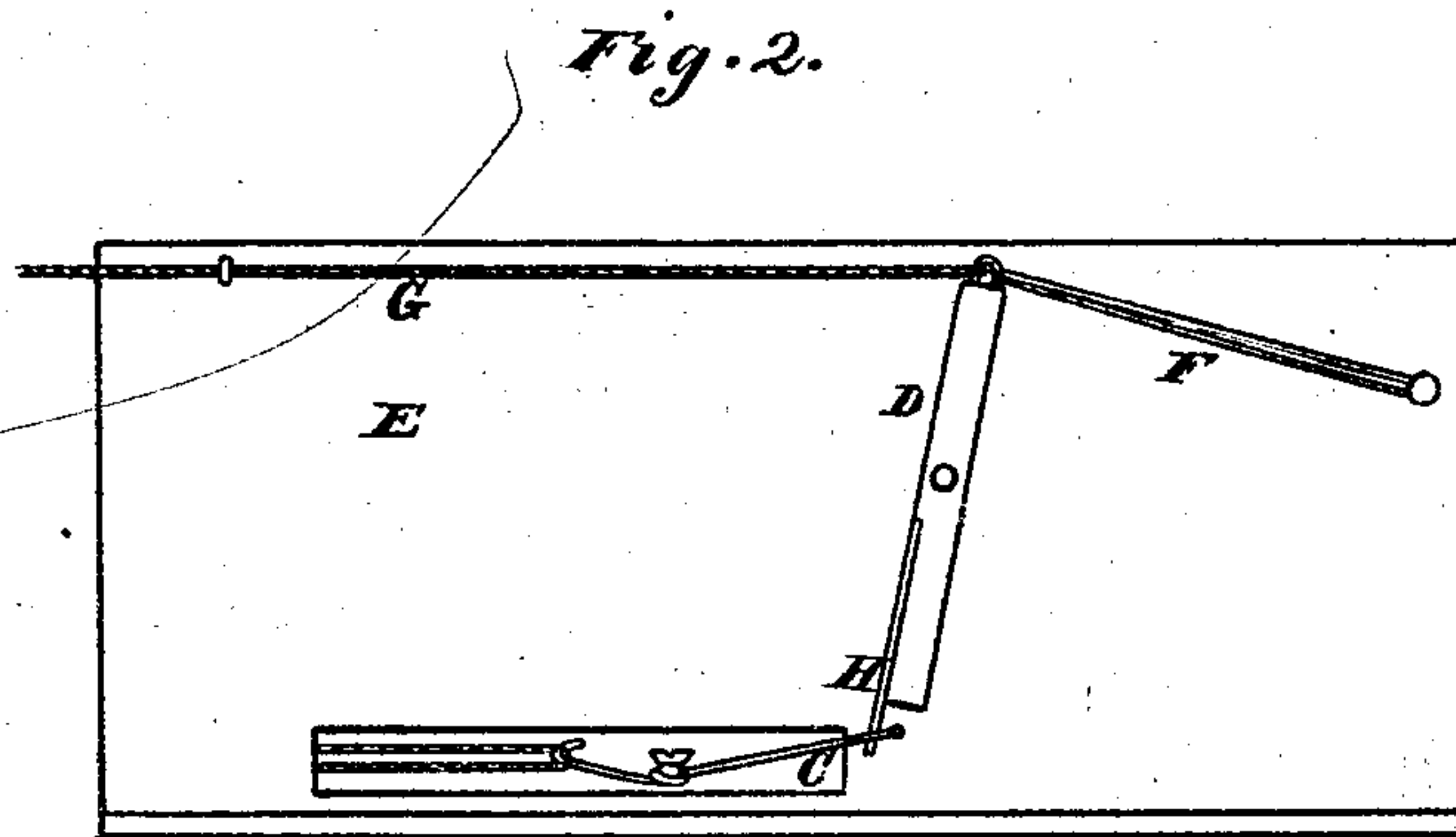
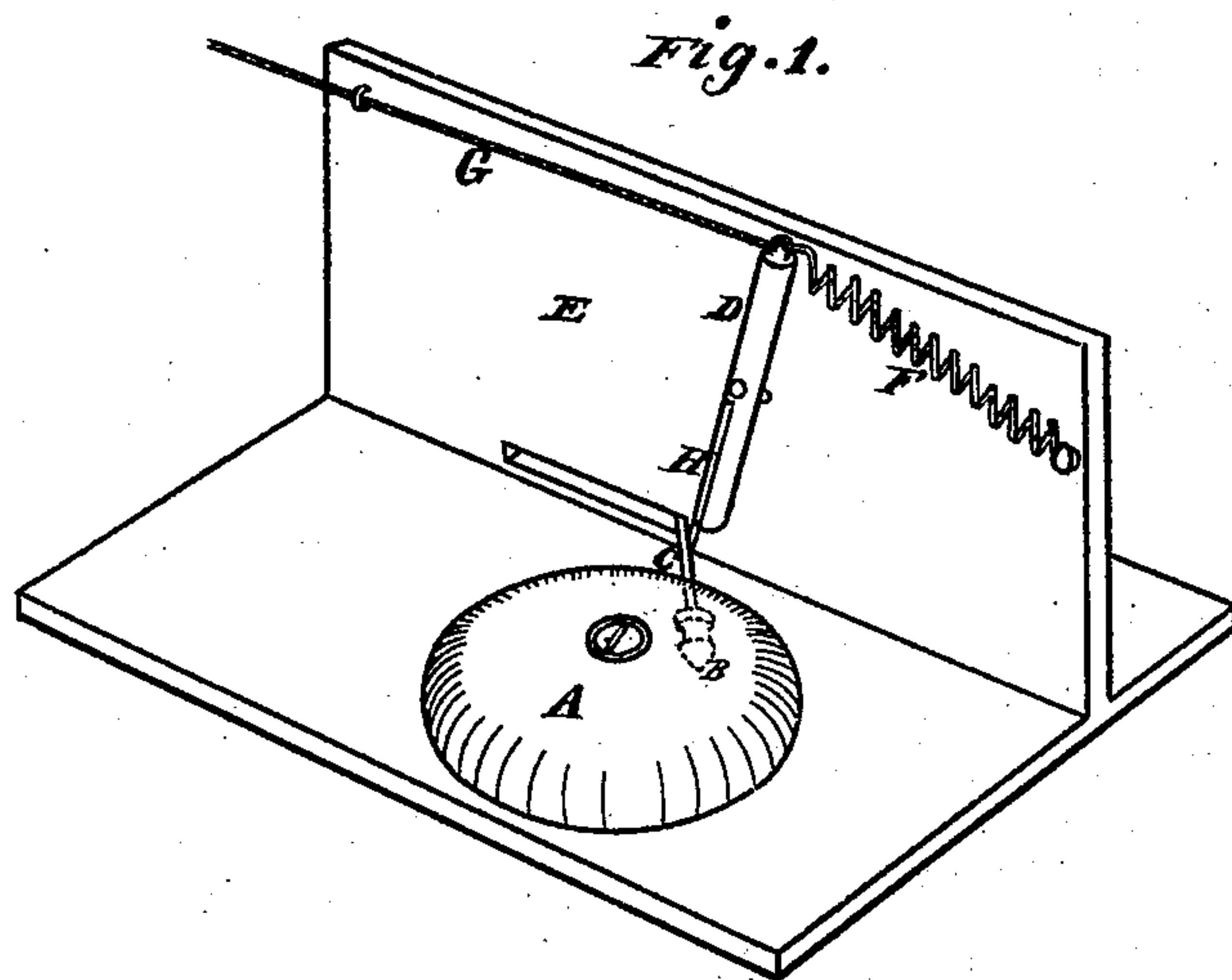


R. BRAGG.

Devices for Releasing Horses, Operated by Alarms.

No. 152,272.

Patented June 23, 1874.



Witnesses

John L. Boone
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Inventor.

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UNITED STATES PATENT OFFICE.

ROBERT BRAGG, OF SAN FRANCISCO, CALIFORNIA.

IMPROVEMENT IN DEVICES FOR RELEASING HORSES OPERATED BY ALARMS.

Specification forming part of Letters Patent No. **152,272**, dated June 23, 1874; application filed March 11, 1874.

To all whom it may concern:

Be it known that I, ROBERT BRAGG, of San Francisco city and county, State of California, have invented an Improved Gong Attachment for Releasing Horses; and I do hereby declare the following description and accompanying drawings are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention or improvement without further invention or experiment.

My invention relates to an improvement upon the device for releasing horses in engine-houses for which I have filed a former application for Letters Patent, which application is now pending.

In my former application the releasing device was operated by the movement of the hammer toward the gong in making the first stroke, the horses being released directly upon the stroke being made; but as the operation of starting the machinery and making the first stroke is one of considerable time (some seconds) I have conceived the idea of operating this releasing mechanism while the hammer is being drawn back preparatory to making the stroke.

Referring to the accompanying drawings for a more complete explanation of my invention, Figure 1 is a perspective view of my device. Fig. 2 is a side elevation.

A is the gong, and B the striking-hammer secured to the arm or handle C. The operating mechanism is released by electrical action whenever there is an alarm of fire, and thus the hammer is made to strike the gong and indicate the number of the district. In order to connect the device for releasing the horses with the gong-hammer it is obvious that many different mechanisms may be employed. In the present case I have shown a lever, D, which is pivoted to the wall E through its center. A spring, F, connects with the upper part of this lever, and serves to draw it forward, and by means of the cord G to operate the releasing apparatus. (Not shown.) In order to retain the lever in its position when set, a spring, H, is so attached to its lower end

that when it is pulled back the end of this spring will pass over the hammer-handle or lever C, and is then allowed to rest against the handle. Now, when an alarm is turned on, the gong-hammer is set in motion, and as it is drawn back preparatory to making the first stroke the end of the spring H will be released, and the spring F operates instantly to draw the lever D forward, thus pulling the cord G and operating the releasing device, so that the horses are free and will have started to their places at the engine before the first stroke is actually made. The operation of the spring also draws the lever D so far out of the way that the handle C will not touch it again, and there will not be the slightest obstruction to the most delicate movement of the striking apparatus. If preferred, the device might be operated by the weight connected with the electrical apparatus.

By this means I obtain two results: First, a slight gain in time, which is also valuable in another way, as the horses are released before they hear the noise of the striking machinery, and are thus prevented from straining upon their halters, as they often do as soon as they hear the noise, and this makes it difficult to release them. The second result is that the device, instead of being an obstacle in any manner to the striking mechanism, actually assists it in making the first stroke, as the strain of the lever D tends to raise the hammer.

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

The trigger D, in combination with the hammer-arm C, spring F, and releasing connection G, the whole being so constructed and operated that the trigger is tripped by the hammer receding to strike, as set forth.

In witness whereof I hereunto set my hand and seal.

ROBERT BRAGG. [L. S.]

Witnesses:

JOHN L. BOONE,
C. M. RICHARDSON.