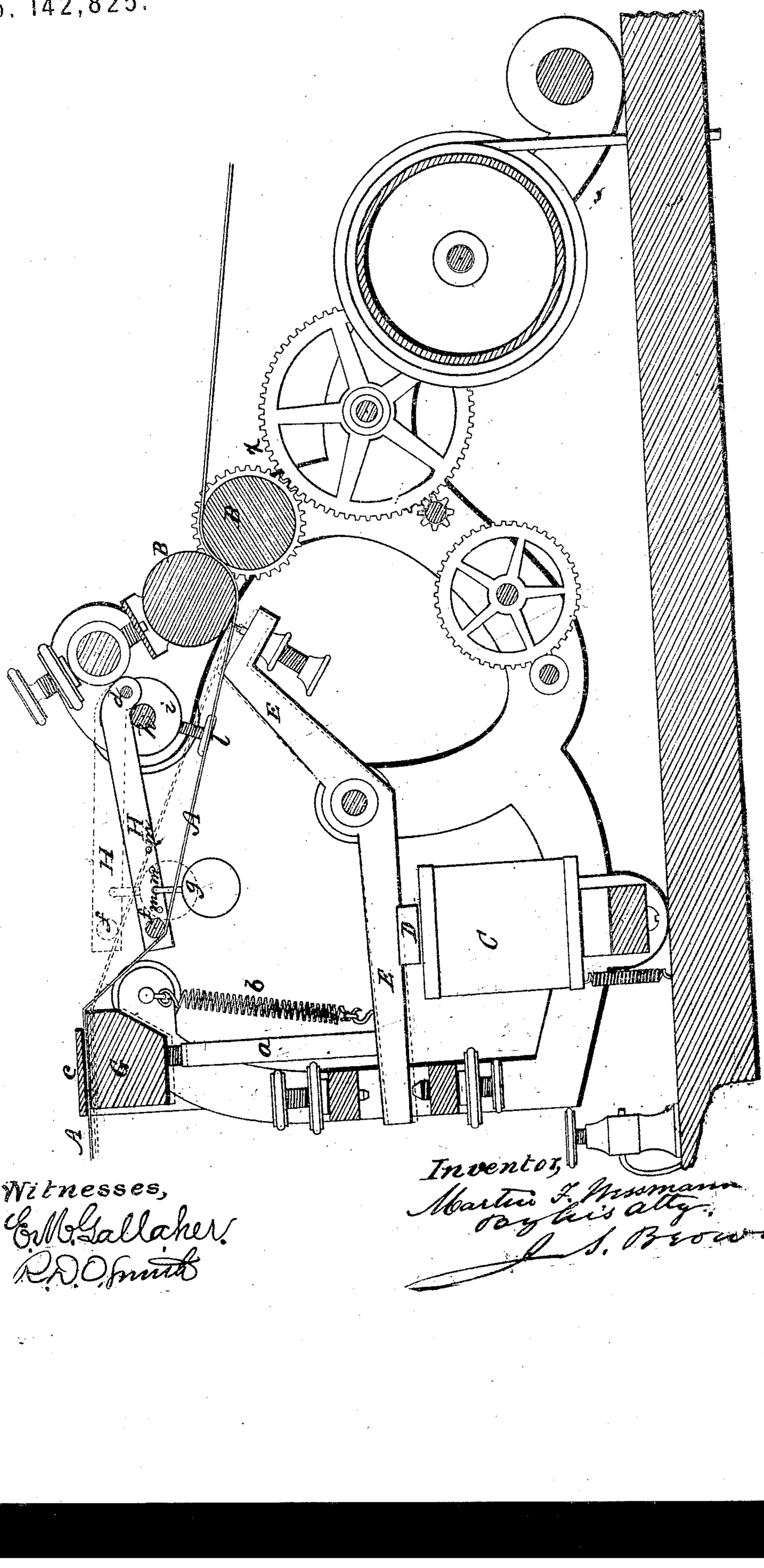
M. F. WESSMANN.

Telegraph Receiving Registers.

No. 142,825. Patented September 16, 1873.



Witnesses,
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UNITED STATES PATENT OFFICE.

MARTIN F. WESSMANN, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN TELEGRAPH RECEIVING-REGISTERS.

Specification forming part of Letters Patent No. 142,825, dated September 16, 1873; application filed February 11, 1873.

To all whom it may concern:

Be it known that I, MARTIN F. WESSMANN, of Brooklyn, in the county of Kings and State of New York, have invented an Improved Telegraph Receiving-Instrument; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing, representing a longitudinal vertical section of a telegraph receiving-instrument provided with my improvements.

My invention consists, first, in a brake or stop attached to or connected with the armature of the marking or printing magnet, the said brake or stop being so arranged that when the magnet-circuit is broken it holds the paper strip from winding off, and releases it when the circuit is closed to mark or print thereon; second, in a swinging arm, or its equivalent, which presses upon the paper strip while the marking or printing magnet is in operation, and keeps it depressed or turned somewhat out of line back of the point of marking or printing; but when the marking or printing mechanism is stopped or intermitted for a second or two, the clock or other movement which feeds the paper through the machine lifts the said arm, straightens the strip of paper, and thereby produces the spacing between the words.

The drawing represents a Morse or equivalent sign-marking instrument for receiving messages by electro-magnetic telegraph, A being the paper strip; B B, the paper-feeding rollers, set in motion by suitable gearing operated by a weight, or its equivalent; C, the marking or printing electro-magnet; D, its armature; and E, the marking or printing lever. The brake or stop G, which, with its adjuncts, constitutes the first feature of my invention, as represented in the drawing, is adjustably attached to a rod, *a*, secured to the marking or printing lever E at a suitable distance from the armature D to give the brake the required extent of movement for accomplishing its purpose. It is raised by a counter-spring, *b*, or its equivalent, and holds the paper strip A, when raised, by pressing it against a stationary counter-surface, *c*. Thus, when the marking or printing magnet is not in action, the paper is held from running through the machine, and all waste thereof is prevented, as well as any unnecessary running down of the movement that feeds the paper; but when the marking or printing lever is brought into action the brake G is lowered, releases the paper strip, and thus allows it to be fed along.

The swinging or vibrating arm or lever H, in which the second feature of my invention consists, is pivoted, at *d*, in a suitable position for the purpose, and a bar or plate, *f*, at its vibratory end presses on the paper strip A. It has a weight, *g*, or its equivalent, to press it downward with the required force, to depress the paper strip out of the line of its motion, as shown by full lines in the drawing, a stop, *h*, limiting its vibratory movement. Either the position of the pivot *d* is made adjustable, as shown in the drawing, by means of the disk *i* and set-screw *l*, or the stop *h* is adjustable. The force of the weight *g* is adjustable by varying its position, as indicated, by the suspending-holes *m m*, so that it will depress the paper strip when the marking or printing lever is in motion by drawing the paper strip over the brake as it is momentarily released by the magnet; but as soon as the printing movement of the said marking or printing lever is stopped and the brake G brought against the paper strip, holding it from being drawn along, the force of the paper-feeding movement is sufficient to lift the arm H against the force of its weight or spring, and to straighten the paper strip, as shown by dotted lines. This straightening of the paper strip is sufficient to produce the required spacing between the words.

This invention is applicable to all telegraph-instruments in which the paper is fed along by a movement separate from the marking or printing mechanism, and also to all kinds of electro-magnetic-signal-instruments which work on the same principle, as for railroad-signals, fire-alarms, &c.

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

1. A brake or stop, G, attached to or op-

erated by the armature of the marking or printing magnet of an electro-magnetic receiving-instrument, operating substantially as and for the purposes herein specified.

2. A vibratory arm, or its equivalent, B, operating substantially as described, in combination with a paper-brake, G, and the marking or printing and the paper-feeding mechanism of an electro-maguetic telegraph receiving-instrument, for the purpose herein specified.

Specification signed by me this 5th day of February, 1873.

MARTIN F. WESSMANN.

Witnesses:
A. W. GLEASON,
E. D. F. SWEET.