T. A. EDISON.

Improvement in Printing-Telegraphs.

No. 128,606. Patented July 2, 1872.

Fig. 2.

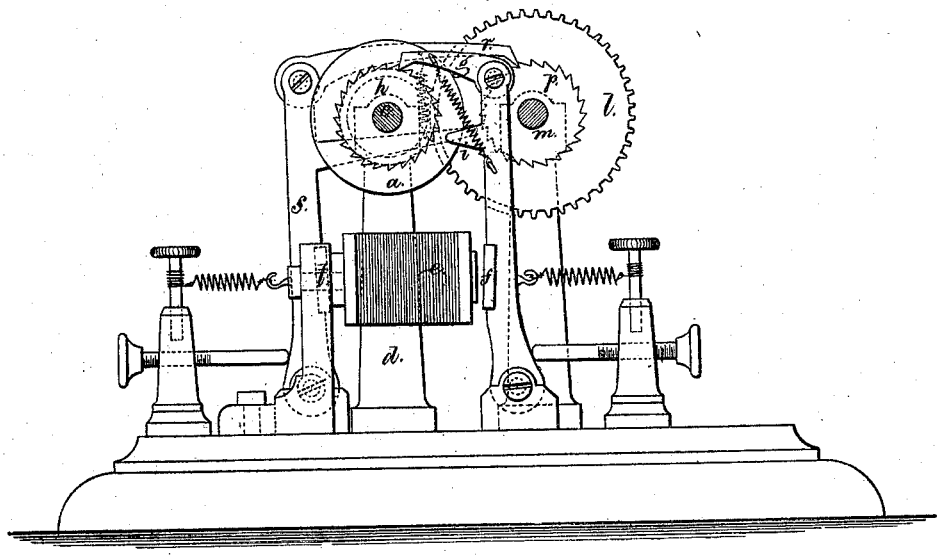
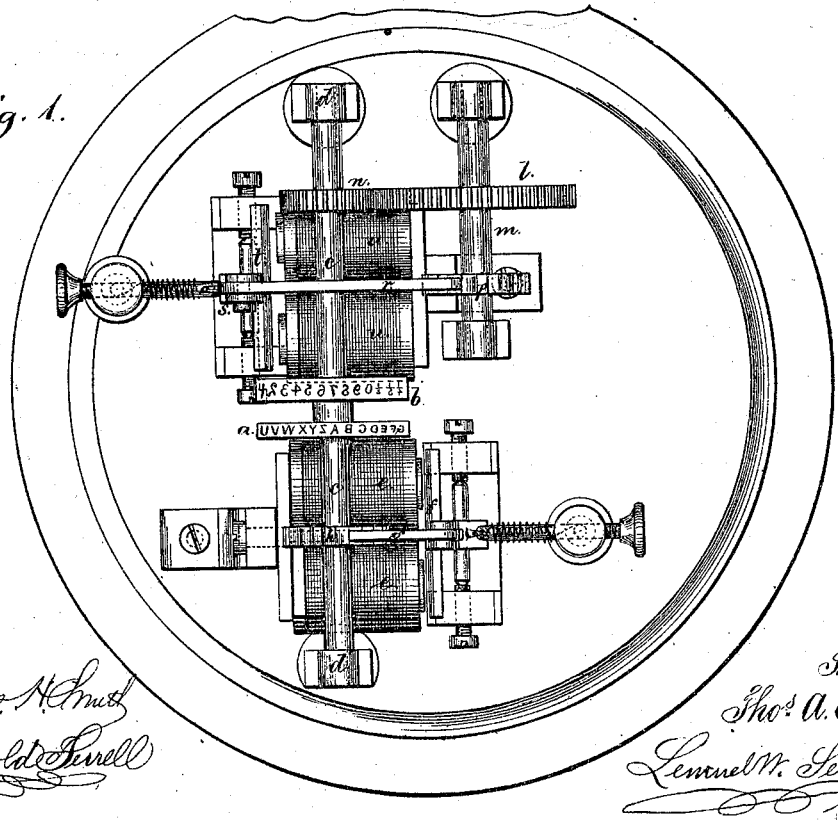


Fig. 1.



Witnesses
Thos. H. Smith
Harold Serrell

Inventor
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Lemuel W. Serrell atty.

128,606

UNITED STATES PATENT OFFICE.

THOMAS A. EDISON, OF NEWARK, NEW JERSEY.

IMPROVEMENT IN PRINTING-TELEGRAPHS.

Specification forming part of Letters Patent No. 128,606, dated July 2, 1872.

To all whom it may concern:

Be it known that I, THOMAS A. EDISON, of Newark, in the county of Essex and State of New Jersey, have invented and made an Improvement in Printing-Telegraphs; and the following is declared to be a correct description thereof.

In printing-telegraphs considerable time is lost in actuating the step-by-step movement, because there is no opportunity to move the type-wheel more than one letter at a time.

My invention is made to promote rapidity in actuating the type-wheel. Said invention consists in a multiplied motion from a step-by-step movement applied to the type-wheel, so that one pulsation on the line will give a motion to the type-wheel equal to two or more letters. The parts are constructed and arranged so that either the multiplied movement can be given, or the single step-by-step motion, according to the letter to be brought into position for printing.

In the drawing, Figure 1 is a plan of my instrument, and Fig. 2 is an elevation of the same.

The type-wheel *a* and figure-wheel *b* are shown as upon the shaft *c*, sustained in suitable frames or bearings *d*, and I remark that these type-wheels may be of any desired character, and either single or double, and the impression mechanism may be of any available character. The magnet *e*, armature *f*, pawl *g*, ratchet *h*, and stop *i* are of any ordinary or desired character, and act to move the type-wheel around one letter at a time by a step-by-step movement. The gear-wheel *l*, upon the shaft *m*, takes into the pinion *n* upon the type-wheel shaft *c*, and these two gears are proportioned so that the wheel *l* contains, say, six times the number of teeth in the pinion; thereby the type-wheel will be revolved six times for one revolution of the shaft *m*. Upon this shaft *m* is a ratchet-wheel, *p*, operated by the pawl *r*, lever *s*, armature *t*, and magnet *u*. If the ratchet-wheels *h* and *p* have the same number of teeth, and the proportion of gearing aforesaid was used, then for each pulsation in the magnet *u* the type-wheel will move six letters or spaces, and complete a revolution in either four or five pulsations of the magnet *u*, according to the number of characters upon such type-wheels. In this manner great rapidity can be obtained, because the long intervals and numerous pulsations required between impressing one letter and the next are lessened. The magnet *u* may be energized by a reversal of the current operating in the magnet *e*, or by a separate line-wire. The transmitting dial or instrument may be of any desired character adapted to these two magnets, and the currents to them.

I claim as my invention—

A type-wheel in combination with two actuating magnets and connections, substantially as set forth, one for operating a step-by-step motion one letter or division at a time, and the other for moving the type-wheel two or more letters or divisions at a time, substantially as specified.

Signed by me this 26th day of April, A. D. 1872.

T. A. EDISON.

Witnesses:
GEO. T. PINCKNEY,
CHAS. H. SMITH.