

(No Model.)

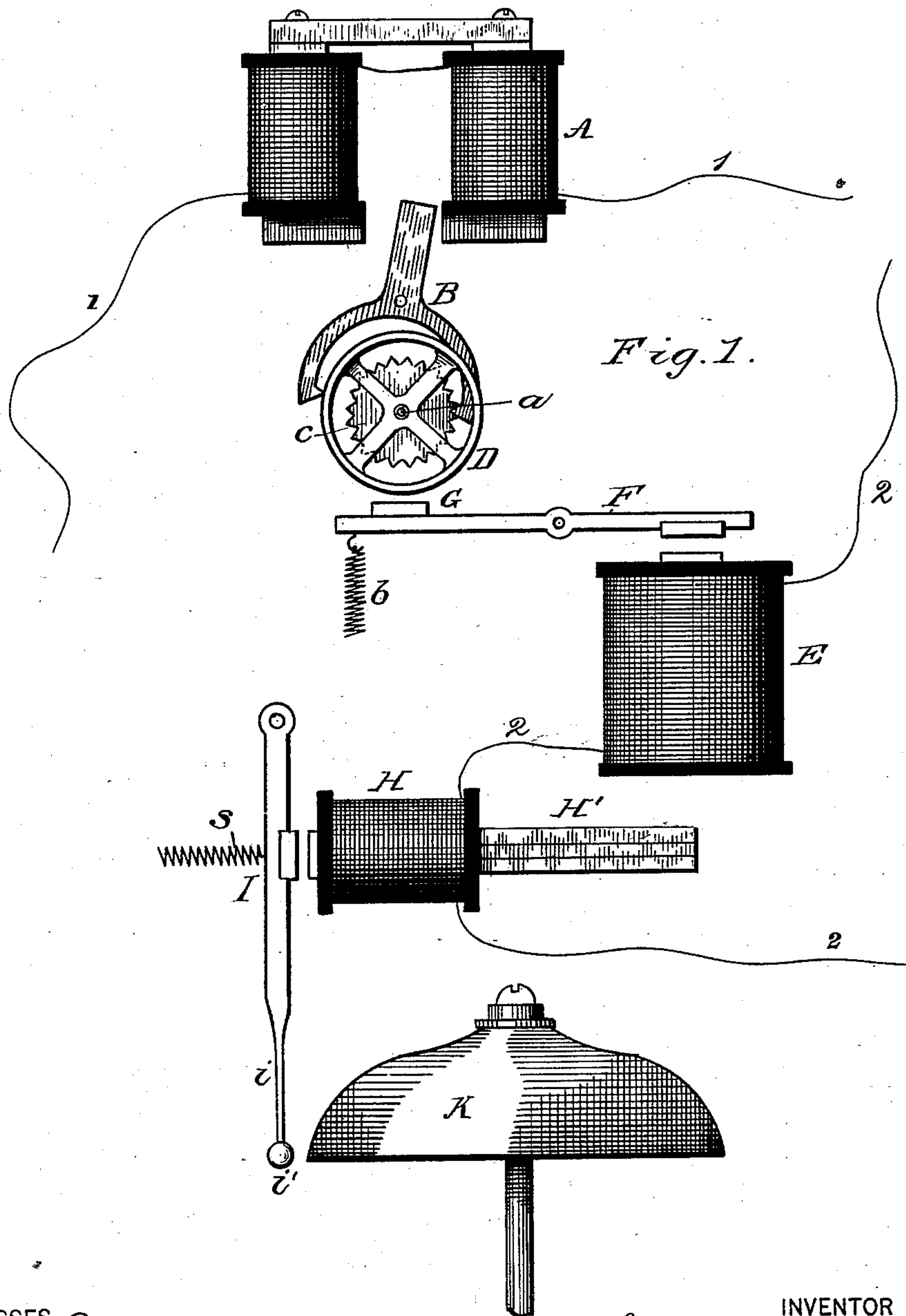
2 Sheets—Sheet 1.

S. D. FIELD.

ALARM FOR PRINTING TELEGRAPHS.

No. 279,730.

Patented June 19, 1883.



WITNESSES

J. W. Reynolds,
J. F. Holden.

INVENTOR

Stephen D. Field
per J. F. Wilbur

ATTORNEY

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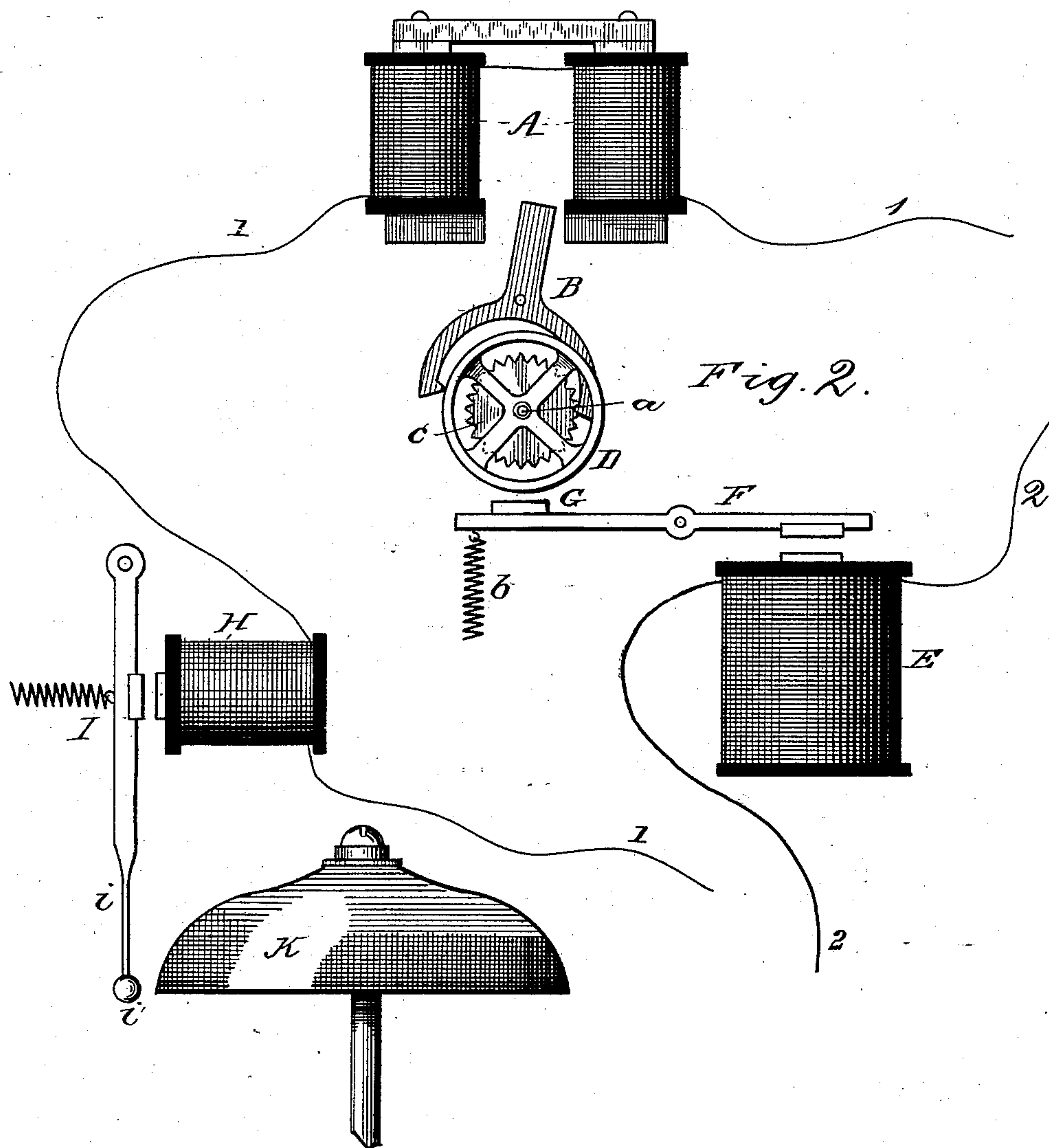
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UNITED STATES PATENT OFFICE.

STEPHEN D. FIELD, OF NEW YORK, N. Y.

ALARM FOR PRINTING-TELEGRAPHS.

SPECIFICATION forming part of Letters Patent No. 279,730, dated June 19, 1883.

Application filed March 10, 1883. (No model.)

To all whom it may concern:

Be it known that I, STEPHEN D. FIELD, of New York, in the county of New York and State of New York, have invented a new and
5 useful Improvement in Printing-Telegraphs; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

10 My invention relates to printing-telegraphs, and more especially to that class which are used to print upon a fillet or band of paper commercial quotations and news, ordinarily called "tickers" or "gold and stock" instruments. As
15 is well known, these are largely in use in commercial communities, operators being stationed at the various exchanges or market-headquarters, who transmit and cause to be printed simultaneously by the instruments in a large
20 number of places prices of commodities and market news. At the places where the quotations and news are received the operation of the "ticker" is automatic, the printing and feeding out of the "tape" being under control of the
25 transmitter, and the tape being inspected only when desired, there being no difference in the operation of the instrument between routine quotations and important news. Sometimes, however, there occurs, and very quickly, a decided
30 change in some particular stock or commodity or in the whole market, or there is news to be transmitted important in its bearing, and it seems desirable that means should be provided whereby at will, under such
35 circumstances, the transmitter may give some indication throughout the whole circuit that something of unusual or extra importance has just been or is about to be sent, so that all interested may be warned to consult the tape.

40 The object of my invention is to furnish such means. To do this I arrange in the circuit of the instrument, or in either the type-wheel or the printing-circuit, an audible alarm, controlled by a magnet operated under a condition of current different from that normally in the circuit
45 in which it is placed. Suppose such circuit be equipped with neutral magnets for its normal work. I arrange therein an alarm operated by a polarized electro-magnet, so that the indication of importance may be given by reversing the current. Suppose it be equipped

with polarized electro-magnets for its normal work. I may arrange therein an alarm operated by a neutral magnet so adjusted that an extra strength of current is required to operate it. 55 Other arrangements might be readily suggested which would be operative for this purpose, the requisite being that the alarm mechanism should be controlled by an abnormal (so to speak) condition of current in its circuit. 60

In the drawings, which are mainly diagrammatic, I have shown two ways of carrying the invention into effect.

In Figure 1, A is a polarized escapement-magnet; B, its armature, formed into an anchor or yoke; and C, the escapement-wheel of a printing-telegraph, rotating and controlling one or more type-wheels, D, mounted on shaft a. E is the printing-magnet, controlling the printing-lever F, having retractor b and platen G, adapted to force the paper against the type-wheel and cause an impression therefrom. These features are of usual construction, and are here typical of any of the well-known forms of gold and stock telegraph-tickers. In 75 the type represented in Fig. 1 the printing-magnet E is a neutral magnet. In its circuit 2 2 is introduced the polarized magnet H H', having armature I, carrying hammer-rod i, ending in hammer i', adapted to strike on bell K when the current 2 2 is in the proper direction. 80

It is to be understood that the form of bell used constitutes no part of this invention, and that it may be varied, there being very many 85 known forms of electro-magnetic bells and mechanical bells controlled by magnets which are suitable for the purposes of the invention. If, now, a zinc current causes H to attract I normally, the printing is effected by a copper current. When, however, the transmitter desires to call attention to matters of importance, he reverses the printing-current, which operates in E as well, and in addition causes H I K to give an alarm and to ring so long as he continues to use the reversed current in the printing-circuit. 95

In Fig. 2 the alarm is placed in the circuit 1 1 of the type-wheel magnet, its magnet here being a neutral magnet, the spring S of the armature-lever being so adjusted that the normal strength of current necessary for the op- 100

eration of A cannot give the degree of magnetization to H requisite to overcome the stress of S. In such case the indications of importance are given by throwing an increased current through circuit 1 1.

From this description it is obvious that the transmitter may at will call particular attention to the record he has caused to be made or is about to cause to be made, so that no time may be lost by those interested in becoming cognizant of the record.

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

15 1. The combination, with a printing-telegraph, of an electro-magnetic alarm apparatus

independent of the type-wheel or printing mechanism, and adapted to be operated at will by an abnormal or changed condition of current in its circuit, substantially as set forth. 20

2. The combination, with a printing-telegraph, of an independent alarm mechanism adapted to be controlled or operated at will by the transmitting-operator under a changed or abnormal condition of current in its circuit, 25 substantially as set forth.

This specification signed and witnessed this 5th day of March, 1883.

STEPHEN D. FIELD.

Witnesses:

FALLEN G. SHINN,

I. B. SCOTT.