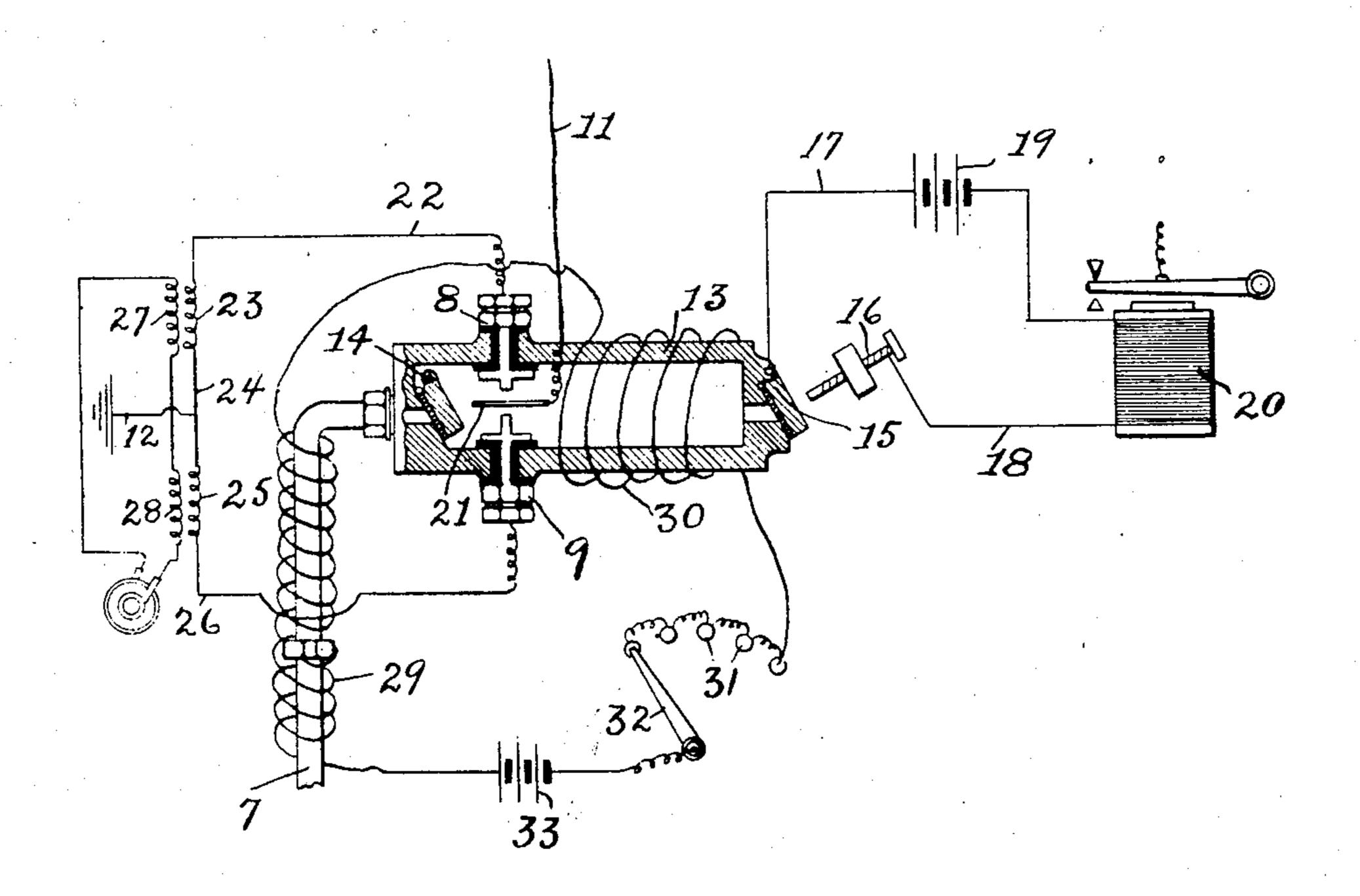
PATENTED JUNE 2, 1908.

No. 889,791.

I. KITSEE.
WIRELESS TELEGRAPHY.
APPLICATION FILED DEC. 21, 1906.



Wilmoodo Edirh P. Stilley Grary & Smith Townson Smoonton

## NITED STATES PATENT OFFICE.

ISIDOR KITSEE, OF PHILADELPHIA, PENNSYLVANIA.

## WIRELESS TELEGRAPHY.

No. 889,791.

Specification of Letters Patent.

Patented June 2, 1908.

Application filed December 21, 1906. Serial No. 348,976.

To all whom it may concern:

phia, in the county of Philadelphia and State 5 of Pennsylvania, have invented certain new and useful Improvements in Wireless Telegraphy, of which the following is a specification.

My invention relates to an improvement in telegraphy and has more special reference 10 to the receiving device of a telegraphic system.

The invention has more special reference to a receiving device adapted to expand or inflame through the incoming impulses a gaseous medium, and has for its object to 15 provide means for assisting the incoming impulses to expand or inflame said medium.

The drawing illustrates in partially plan and partially sectional view my invention, the electric circuit being in diagram.

13 is the explosive chamber provided with the valves 14 and 15 and the inlet pipe 7. A localized circuit comprising the wire 17, battery 19, electro-magnet 20, wire 18, and adjustable contact 16, is in operative relation 25 to the valve 15. The explosive chamber is provided with the terminal 21 in electrical conne tion with the terminal 11 of the transmitting circuit. The terminals 8 and 9 are connected respectively to the wires 22 and 30 26. To these wires are connected the secondaries 23 and 25, joined together through wire 24 and this wire is grounded through 12.0 The secondary 23 is provided with the primary 27 and the secondary 25 with the pri-35 mary 28. The operation of this part of the arrangement is as follows: Normally, an interrupted or alternating current is passed through the primaries 27 and 28, thereby generating alternating or rapidly recurring 40 impulses in 23 and 25. These impulses should not be sufficient to produce a spark between 8 and 9, but they should be of suf-

45 to 8 or 9, as the case may be. With the aid of this arrangement, it is possible to so enforce the incoming impulses that the same no matter if originally too weak to produce the necessary spark of high temperature-50 can be used to explode the gas or other medium contained in the chamber 13.

ficient strength, so as to enforce the impulse

coming through 11 and going from 21 either

To raise the explosive medium, such as a gas, to a temperature short of the explosive temperature, I have provided the inlet pipe 55 7, as well as the explosive chamber, with the l

heating coil and designate this coil by the Be it known that I, Isidor Kitsee, citizen | numerals 29 and 30. In the circuit of this of the United States, residing at Philadel- | coil is a source of current, here shown as the coil is a source of current, here shown as the battery 33, and the variable resistance designated by the numeral 31 and its lever by 60

the numeral 32.

It is obvious that instead of heating the gas with the aid of this electric current, other means may be provided for this purpose, but I believe that this arrangement, as outlined 65 in the drawing, is preferable, because it is '." possible therewith to maintain an even temperature throughout the operation.

Having now described my invention, what I claim as new and desire to secure by Letters 70

Patent is:

1. In combination with a receiving device wherein through the expansion of a gaseous medium a localized translating device is operated, means to heat said gaseous medium 75 independent of the heating means of the incoming impulse.

2. In combination with a receiving device wherein through the expansion of a gaseous medium a localized translating device is op- 80 erated, means to enforce the heating effect of the incoming impulses, said means comprising means to generate locally impulses adapted to enforce the impulses transmitted.

3. In combination with a telegraphic re- 85 ceiving device wherein the heating effect of the incoming impulses is made to expand or inflame an inflammable medium, means to raise the temperature of said inflammable medium independent of the incoming im- 90 pulses and means to enforce the heating effect of said impulses.

4. In combination with means to explode gases through incoming telegraphic impulses, means to raise the temperature of said gases 95 independent of said impulses to a degree short of the degree necessary for said explo-

sion.

5. In combination with means to explode gases through the heating effect of the in- 100 coming telegraphic impulses, means to increase said heating effect through the enforcing of said impulses with impulses locally generated.

In testimony whereof I affix my signature 105

in presence of two witnesses.

ISIDOR KITSEE.

Witnesses:

MARY C. SMITH, ALVAH RITTENHOUSE.