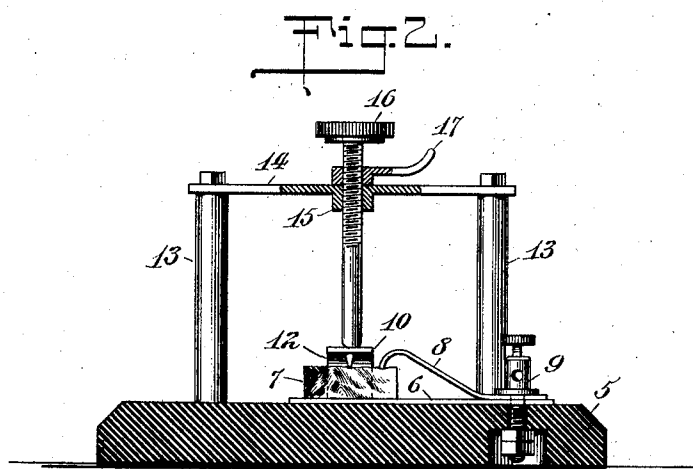
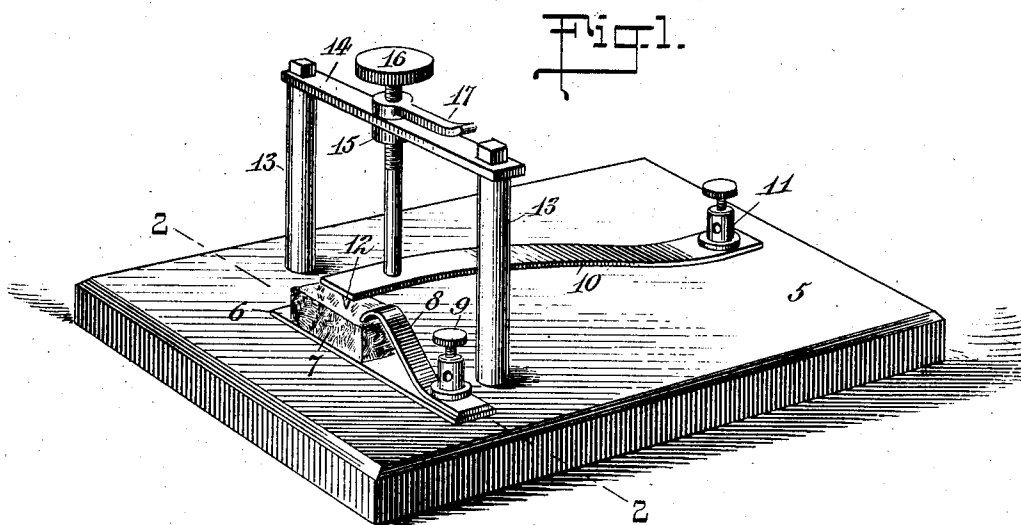


M. B. JOHNSON.
 DETECTOR FOR WIRELESS SIGNALING APPARATUS.
 APPLICATION FILED OCT. 6, 1910.

1,009,317.

Patented Nov. 21, 1911.



WITNESSES

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DETECTOR FOR WIRELESS SIGNALING APPARATUS.

1,009,317.

Specification of Letters Patent. Patented Nov. 21, 1911.

Application filed October 6, 1910. Serial No. 585,545.

To all whom it may concern:

Be it known that I, MAURICE BERNAYS JOHNSON, a citizen of the United States, and a resident of San Antonio, in the county of Bexar and State of Texas, have made and invented certain new and useful Improvements in Detectors for Wireless Signaling Apparatus, of which the following is a specification.

10 My invention relates to an improvement in detectors, such, for instance, as are used or employed in wireless telegraphy or telephony, the object of the invention being to provide a device of this character which shall be simple and cheap to manufacture, efficient in use, and by means of which a fine and accurate adjustment of the parts may be secured and permanently retained.

A further object of the invention is to provide a detector which shall be universal in its application, that is, by means of which any of the well known minerals or materials may be employed and removably held in proper position, and with these and other ends in view the invention consists of certain novel features of construction and combinations of parts as will be hereinafter fully described and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in perspective of my improved detector. Fig. 2 is a sectional view taken on the line 2—2 of Fig. 1.

Referring to the drawings, 5 represents the base, constructed of any desired size and shape, and of any insulating material, such as hard rubber, glass, etc. To this base 5 is clamped, or otherwise secured, the supporting plate or strip 6 made of brass or other desired material, and upon which is removably held the mineral 7, this element 7 comprising any of the well known minerals used in detectors as now commonly constructed, as for instance, silicon, carborundum, iron pyrites, etc. In order to retain this mineral in its proper position, I secure to the base plate 5, and also to the supporting plate 6, the spring 8, one end of which is tightly secured to the binding post 9, and the opposite end preferably curved and bearing upon the mineral 7, the said spring 8 being made, of course, of a conducting metal, such as spring brass, copper, etc. To the base plate 5 is also secured one end of the spring 10 by means of the binding post 11, this spring acting as a conductor and provided at its free end with the lug or projection 12,

which, when said spring 10 is depressed, as hereinafter described, contacts with the mineral 7. In order to adjust or vary the conducting pressure of the point or lug 12 on the mineral 7, I secure to the base plate 5 the post or standards 13 connected by the cross-bar 14, the latter being provided with a sleeve 15 into which is threaded the adjusting screw 16, the lower end of which bears upon the spring 10. On this adjusting screw 16 is also threaded the lock-nut or lever 17, which, when turned in the proper direction, tightly binds upon the cross-bar 14 and securely holds the adjusting screw in its proper position and against any accidental turning or rotation.

In practice, when it is desired to adjust the detector, that is, by varying the pressure of the spring or conductor 10 upon the mineral 7, it is simply necessary to turn the lever or lock-nut 17 in the proper direction, whereupon the adjusting screw 16 may be rotated to travel upwardly or downwardly and thereby vary the pressure of the lug or projection 12 on the mineral 7. When the proper adjustment has been made, the lock-nut 17 is properly turned on the adjusting screw to bind or hold the same in its adjustment and thereby avoid any subsequent or accidental turning or rotation of the adjusting screw 16.

From the foregoing it will be understood that my invention is exceedingly simple in construction, can be manufactured at a small cost, may be easily, readily and accurately adjusted, and adapted for use in connection with any of the minerals now commonly employed in this class or type of instruments.

What I claim is:—

1. A detector for use with wireless telegraph apparatus comprising a supporting base of non-conducting material; a metallic plate resting upon said base; a mineral substance resting upon said metallic plate; a leaf spring the free end of which is adapted to engage said mineral substance to thereby press it into contact with said plate and hold it in place; an element adapted to contact with said mineral substance; and a screw engaging said element and adapted to force the same into contact with said mineral substance, said mineral substance and the element which contacts therewith being included in a circuit through which a current of electricity may flow.

2. A detector of the character described

comprising a base plate of non-conducting material, a metallic plate resting upon said base plate, a mineral substance resting upon said metallic plate, a spring secured in position upon said metallic plate and adapted to engage said mineral substance to hold it in place, a second spring, one end of which is secured to said base plate and the other end of which contacts with said mineral substance, a support independent of said second spring mounted on said base plate, and an

adjusting screw carried by said support and the end of which engages said second spring, substantially as described.

Signed at New York, borough of Manhattan, in the county of New York and State of New York, this 30th day of September, A. D. 1910.

MAURICE BERNAYS JOHNSON.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."