

Case No. 3,672. DAY ET AL. V. BANKERS' & BROKERS' TEL. CO.

[9 Blatchf. 345; 1 O. G. 551; 5 Fish. Pat. Cas. 268; Merw. Pat. Inv. 200.]¹

Circuit Court, S. D. New York.

1872.

PATENTS—NOVELTY—INTERPRETATION—TELEGRAPHIC APPARATUS.

1. The second claim of the reissued letters patent for an “improvement in electro-magnetic telegraph,” granted to Samuel F. Day, March 23, 1869, namely, “the arrangement of the sounding box, C, the lever, D, and the sounding post, G, of a magnetic telegraph, in combination with each other, in the manner hereinbefore described, and to the effect stated,” is void, for want of novelty.
2. The combination covered by such second claim is one which is capable of being used either in a local current, or in a main Hue current, and is not claimed merely when used where a local battery is dispensed with.
3. The use of such combination in a local current would be an infringement of the claim; and the prior use of the arrangement in a local current is an answer to the claim.

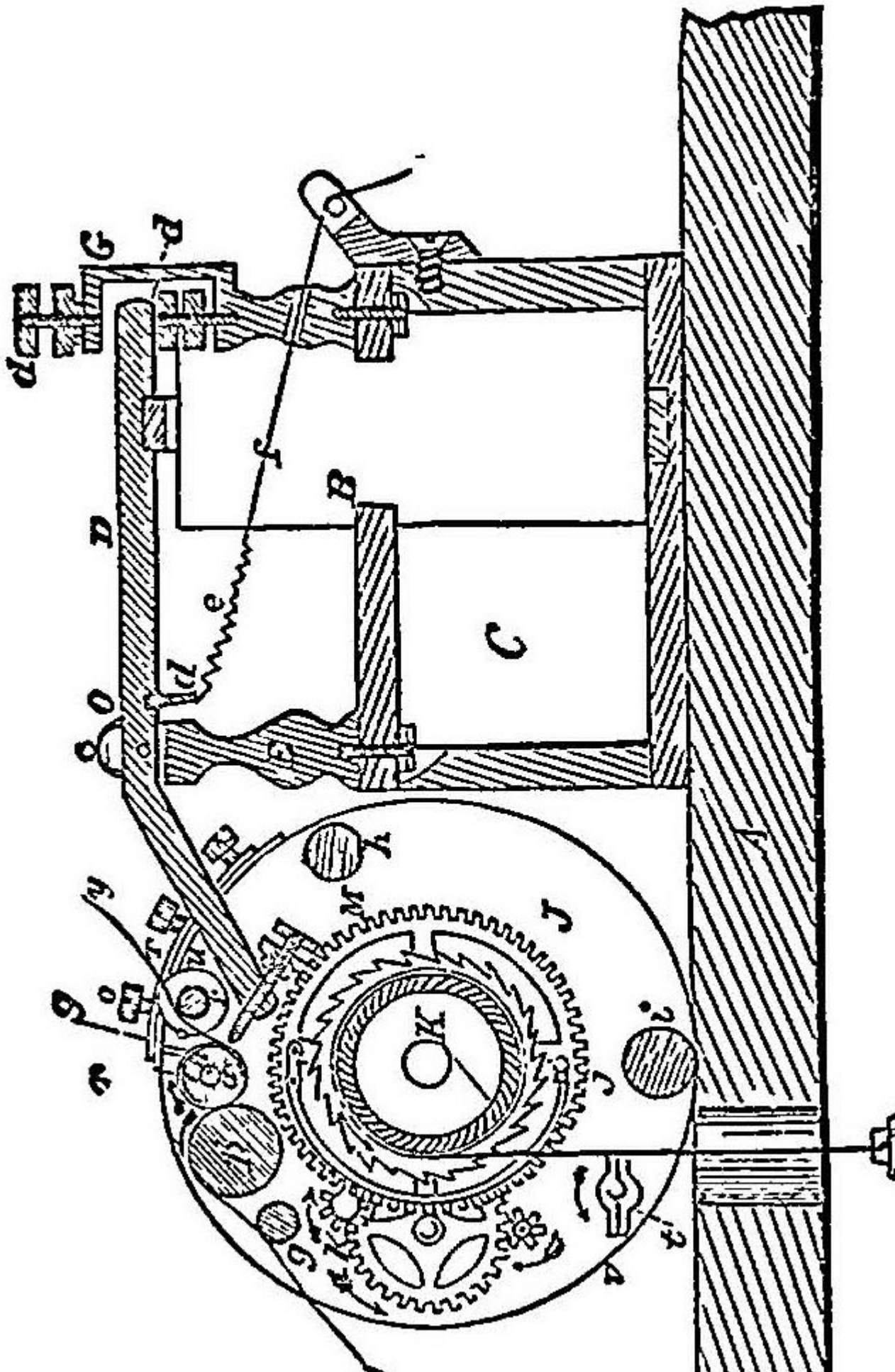
[Cited in *Peters v. Active Manuf'g Co.*, 21 Fed. 321.]

4. The combination claimed is the arrangement of the sounding box, lever, and sounding post, relatively to each other, so that the blow of the armature will be struck directly towards the box, so as to produce a vibration of the box, and consequent sound, by direct action, and so that the sound produced by the blow will be more audible than if the blow were not struck at all in connection with a box or hollow base, but were struck in connection with a solid base, or were struck in connection with a box or hollow base, but not directly towards it.
5. Such an arrangement existed previously, though in a small instrument used only in a local current, the box and the magnet being small, and the sound feeble; but the absolute parts, and their relative arrangement, and their action, and their effect, remaining the same, it required no invention to make the box larger, to produce more sound, so as to use it in a longer circuit, with a larger and heavier magnet.

In equity. Final hearing on pleadings and proofs.

Suit brought upon letters patent [No. 42,842] for an “improvement in electro-magnetic telegraph,” granted to complainant, Samuel F. Day, May 24, 1864, and reissued March 23, 1869 [No. 3,335].

DAY et al. v. BANKERS' & BROKERS' TEL. CO.



The first of the foregoing engravings represents a sectional, and the second a plan or top view of the apparatus. It is believed that, by reference to them, in connection with the ample quotations from the specification in the opinion of the court, the nature of the invention can be readily understood.

Thomas P. How, for complainants.

Charles H. Wesson, for defendants.

BLATCHFORD, District Judge. This suit is founded on reissued letters patent granted to Samuel F. Day, one of the plaintiffs, March 23d, 1869, for an "improvement in electro-magnetic telegraph," on the surrender of original letters patent granted to him May 24th, 1864. The second claim of the patent is the only one in question in this suit. The specification says: "This invention relates to a certain improvement in Morse's electro-magnetic telegraph, which dispenses-with the use of local batteries and relays at the several stations on the line; and it consists, in part, in the adaptation to, and combination of, an indenting register with the main line. Said invention also consists in the arrangement in combination with the other parts of the instrument, of a sounding box, in the manner hereinafter set forth, by which the audibility of the sound produced by the blow of the registering lever is very much increased, thus enabling the operator to catch the sounds with much greater facility, in case he desires to read a message by sound." The specification then proceeds to describe the construction of the apparatus, with references to the drawings. So far as the improvement covered by the second claim is concerned, the arrangement is this: There are two electro magnets placed in a vertical position, and surrounded by a sounding box, C. D is a lever, with a pin or arm projecting downward from its under side. This lever is attached to an arbor and is centred between two thumb-screws, which terminate in a standard, E. An adjustable thumb-screw, with a steel point F, is attached to that portion of the lever, D, which is represented in the drawings as being bent downward. The opposite end of the lever terminates between a standard, G, provided with suitable thumb-screws for adjusting said lever according to the strength of battery on the main line. The lever, D, is hung on the standard, E, at about two-thirds its length, taken from the right hand end of the lever. A spiral spring is made to fasten on the arm or pin of the lever, D, the tension of which is regulated by a thumb-screw, around the shaft of which a fine cord is wound, which cord passes through the centre of the standard, G, and connects with said spiral spring. The object of such spiral spring is to withdraw the armature on the lever, D, from the electro-magnets, when the circuit is broken. The apparatus is provided with clock-work machinery, to feed continuously paper which is to be marked by the indenting register. When the circuit is closed, and the armature is attracted to the magnets, the steel point F, is forced into the moving paper, and produces on it strokes or dots. The specification then states, that it is necessary to the success of the instrument in a main line current, not only that the fulcrum of the lever,

YesWeScan: The FEDERAL CASES

D, should be placed as near as practicable to that end of the lever which carries the steel point F, but that the magnets should, instead of being made of No. 22 wire, be made

of No. 32 wire, and instead of being made of a weight of from four to eight ounces of wire, be increased to from twenty ounces to two pounds in weight, and that the length of the cores should be increased to about three inches, and their diameter to three-eighths or one-half of an inch. The specification proceeds: "By constructing my apparatus in this manner, I am enabled to work an indenting registering instrument in a main line circuit of any ordinary length, without the intervention or aid of a local battery, and by this means I entirely avoid the expense and trouble of the latter. This might, perhaps, be done by the change in the construction of the magnet, without changing the lever from an equal beam, but I prefer to construct the lever in the manner described, as it very materially aids in the accomplishment of the result. The combination with a registering instrument, of a magnet constructed as I have described, enables the line current to operate upon the instrument with great intensity, and this intensity well supplies the place of the volume derived from the local battery, by which it is now customary to work such instruments. The object of the improvement being to work an indenting-registering instrument by the power of the main line current, it is obvious that the nature and gist of the invention consist in giving to the parts such a construction as to cause this current to act upon the instrument with sufficient intensity to properly indent the paper for ordinary business purposes, on a line of ordinary or equivalent construction and length, in such a manner as to be available for the ordinary purposes of telegraphing, and that the line of distinction between this invention and the old form and manner of construction, is found in the adaptation of the instrument to the successful accomplishment of this purpose, of which it was before incapable. It will be observed, that the fulcrum post, E, and the sounding post, G, are set upon the top of the box, G, instead of being attached directly to the bed-plate of the machine, as in the construction now in common use. The object of this improvement is to make the sound produced by the blow of the lever more audible, which result it accomplishes in a very satisfactory manner, thus enabling the operator, if qualified, to read by sound, if desirable, under circumstances in which it would otherwise be difficult if not impossible. It will be observed, that the sounding post or part upon which the blow is struck, is so attached to the sounding box, C, and the ether parts are so arranged in connection with it that the blow is struck directly towards the box, in such a manner as to produce vibration thereof by direct action; that is to say, a tangential line, drawn from the arc in which the armature vibrates, at the point at which the blow is given, would intersect the box, making the action of the blow direct in producing the vibration and consequent sound. It is only in this way that the full effect of the blow, in producing the sound for reading the message, can be realized. I am aware that an instrument has before been constructed, in which the coils have been placed longitudinally above a similar box, and the blow struck in a line parallel to the top of the box, and passing outside of and above said box; but this does not accomplish the purpose of my invention, as the action of the blow is not

and cannot be direct, but is only incidental, and does not have that effect in developing sound from the box, which a direct blow would have.” The claims are these: (1.) “I claim combining with an indenting telegraphic registering instrument, a magnet constructed according to the proportions described in the foregoing specification, or substantially so, so as to accomplish the result stated, by means substantially the same, that is to say, so as to give sufficiency of intensity and power of action to produce uniformly legible indentations in the paper, in an ordinary fine current without the aid of a local battery, as hereinbefore set forth.” (2.) “I also claim the arrangement of the sounding box, C, the lever, D, and the sounding post, G, of a magnetic telegraph, in combination with each other, in the manner hereinbefore described, and to the effect stated.”

The principal defence urged, in respect to the second claim of the patent, which is the only one alleged to have been infringed, is its want of novelty.

There can be no doubt, from the language of the specification and claim, and from the evidence, that, while the combination specified in the first claim is one for use only in a main line current, when a local battery is dispensed with, the arrangement or combination covered by the second claim is one which is capable of being used either in a local current or in a main line current, and is not claimed merely when used where a local battery is dispensed with. The combination in the second claim is claimed “in the manner hereinbefore described, and to the effect stated.” The “manner” is the arrangement of the sounding box, lever, and sounding post, relatively to each other, so that the blow of the armature will be struck directly towards the box, so as to produce a vibration of the box, and consequent sound, by direct action. The “effect” is, to make the sound produced by the blow more audible than if the blow were not struck at all in connection with a box or hollow base, but were struck in connection with a solid base, or were struck in connection with a box or hollow base, but not directly towards it. This arrangement or combination, in the second claim, is applicable as well to a local current, produced by a local battery, as to a main line current, where a local battery is not used; and the use of the arrangement in a local current would undoubtedly be an infringement of the claim. Hence, the

prior use of the arrangement in a local current is an answer to the claim.

The evidence is clear, that the arrangement or combination, in the second claim, of the sounding box, lever, and sounding post, with the blow struck directly towards the box, was in use, as a successful, practical telegraphic instrument, a considerable time before the invention of Day. To say nothing of any other apparatus, that represented by Exhibit No. 6 was so in use. It produced the "effect" stated in the specification, of making "the sound produced by the blow of the lever more audible" than it would be with a solid base. It was known by the name of the "Chester Sounder." It had, and could have, no other object than to make more sound than would be made by a solid base, the base being a box made hollow, and the blow being struck directly towards the box. The instrument was small, and the box was small, because it was intended for use, and was used, only in a local current, and the magnet was small, and the sound was feeble, at most. But the moment the occasion arose for using an instrument that would make more sound, the production of more sound, by making the box larger, was obvious, and was no invention. It was only the difference between a large dram and a small drum. The absolute parts, and then; relative arrangement, and their action, and the effect, are the same in the patent as in the Chester sounder, only the sound is louder, because the box is larger. The Chester sounder produced more sound with its box than if the base had been solid. Day's apparatus produces more sound than Chester's, but only because the box is larger. The difference is one merely in degree, not in patentable substance.

The date of the existence of the Chester sounder is carried back to 1858 or 1859—a time anterior to the invention of Day. In the shape in which it then existed, it continued to be used until quite recently. It was a complete and successful instrument, and was used in telegraph offices in various parts of the United States, in local circuits. The instrument was placed upon a box, the coils were set in a perpendicular position, the lever was horizontal, the blow was struck on the end of a sounding post, in a direction towards the box, and the sounding post and the supports of the lever centres were fastened to a metallic plate, which plate was screwed to the top of the box. When the circuit was closed, the lever was drawn down, and struck the sounding post, and the blow produced a sound which was louder, because the sounding post was attached to a box, instead of being attached to a solid base. The combination of parts, their arrangement relatively to each other, the direction of the blow, and the effect in sound, were the same, in substance and in kind, as in the combination covered by the second claim of the Day patent. The instrument was not practically applicable to a long line or main circuit, but only to a local circuit, or a line a few miles in length. But the difference between a main circuit and a local circuit is merely one of length. It is shown that, the larger and heavier the magnet, the greater the range of length of line on which the Chester sounder would work, and the large the box, the louder the sound. I cannot resist the conclusion, from the evidence, that

Day's sounder is merely the Chester sounder, adapted, indeed, for use on a main circuit, by having a larger magnet and a larger box and its other parts proportionally enlarged, but the combination of parts, their mode of operation, and their result in kind, as claimed in the second claim of the patent, remaining the same as in the Chester sounder. It may, perhaps, be, that Day invented something, in connection with the sounder, which he can patent by a proper claim. But, what he has patented, in his second claim, existed before, in the Chester sounder. He merely claims the sounding box, lever, and sounding post, in combination with each other, to make a louder sound when the lever strikes the sounding post, by reason of the apparatus being set on a hollow box, instead of a solid base, and the blow struck directly towards the box. The three parts are not claimed in combination with any particular magnet, or with any other part of the apparatus. They are not claimed in combination with a larger magnet, to work in a main line circuit, (if such a claim could be made.) but are claimed only in combination with each other, to make a louder or more audible sound in any circuit, long or short, and with any size of magnet—to develop sound from a box, by a blow struck directly towards the box.

The result is, that the bill must be dismissed, with costs.

¹ [Reported by Hon. Samuel Blatchford, District Judge, and here reprinted by permission. Merw. Pat. Inv. 200, contains only a partial report]