(No Model.)

I. KITSEE.

ELECTRIC SIGNAL.

No. 265,677. Patented Oct. 10, 1882.

Fig. 1.

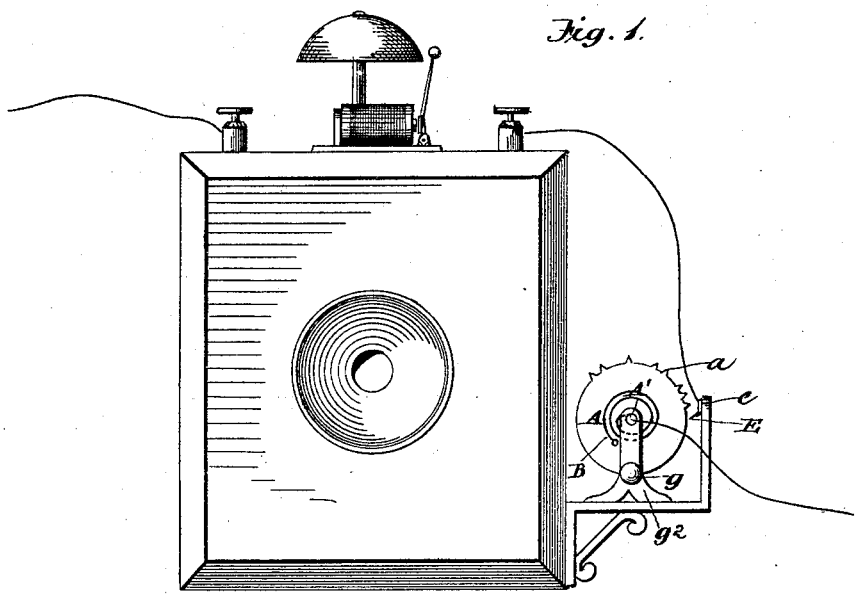

Fig. 2.

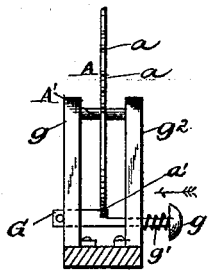

Fig 3

WITNESSES:

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ELECTRIC SIGNAL.

SPECIFICATION forming part of Letters Patent No. 265,677, dated October 10, 1882.

Application filed January 31, 1882. (No model.)

To all whom it may concern:

Be it known that I, ISIDOR KITSEE, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and useful Improvement in Circuit-Breakers, of which the following is a specification.

My invention has for its object the provision of means whereby distinctive signals shall be transmitted by electricity to any given point.

My improvement is adapted to be used on telegraphic and telephonic circuits, and to actuate any form of annunciator.

To the accomplishment of the above-named purpose my invention consists preferably in a circular disk provided at its periphery with projections or teeth which operate against a spur or point arranged upon any suitable support in close proximity to the dentated periphery of said disk.

It also consists in the means whereby such disk is set in motion.

It also consists in means for causing said disk and said spur to make and break an electric circuit.

Referring to the drawings, in which similar letters of reference indicate like parts, Figure 1 represents my invention attached to an ordinary telephone transmitting-box. Fig. 2 is a side detail view of my improvement detached. Fig. 3 is a detail view of the disk, showing its detent.

A represents a circular metallic disk, provided upon its periphery with teeth, *a*, arranged in desired groups, as shown. The disk A is mounted on a shaft, A′. Such shaft A′ is journaled in insulated bearings. Upon one side of the disk is a curved spring, B, arranged to rotate the disk when released from tension.

E represents a metallic spur attached to a supporting-standard, *e*, opposite and near the periphery of the disk A, which spur is struck by the teeth *a* successively when the disk is rotated. Both the disk A and spur E are connected to the line-wire of an electric circuit. Thus it will be readily understood that by the contact and withdrawal of the teeth *a* to and from the spur E the circuit will be closed or broken, as the case may be, and a given signal will be transmitted over the circuit to a terminal station. The teeth *a* are represented in the drawings arranged in groups, thus: first a group of three, then two, then one, then two. Thus I illustrate a signal, |||. ||. |. ||., and when a disk provided with such a group is actuated it will indicate at the receiving-station that instrument No. 3,212 is being operated. It is manifest that a permutation manual can be prepared so as to provide for any number of signals, each of a distinctive character.

I am aware that circuit-breakers of this character have been used before, and I lay no claim broadly thereto. My present improvement relates to the mechanism that operates devices of the character described, and for the purpose of fully describing the same, so that those skilled in the art to which it relates may fully understand it, I have illustrated it as attached to an ordinary telephone-transmitter box.

g is a push-button attached to a shouldered bolt, G. This bolt engages within a detent, *a′*, upon the disk A, serving to lock it and to keep the spring B in tension. The bolt G is kept extended outwardly, as plainly shown in Fig. 2, by means of a spiral spring, *g′*. The bolt G passes through guide-blocks g^2 g^2. Pressure being applied to the push-button, the bolt is released from the detent, and the tension being withdrawn from the spring B, the disk A will at once rotate, and its peripheral teeth will be successively brought against the spur E, and the metallic contact so made will close the circuit. So, also, as the spaces intermediate of the teeth come opposite the metallic spur the circuit will be broken.

Having now fully described my invention and its operation, what I claim is—

1. In an electric-circuit breaker, the combination of a rotating metallic disk having on its periphery groups of extending teeth held in tension by a spring provided with a detent on its periphery, said detent arranged to receive an engaging-bolt operated by a push-bar, said metallic disk being mounted on insulated bearings, with a coinciding metal spur, said spur and said disk being in electric connection with the line-wire of an electric circuit, all arranged as set forth, adapted, when said disk is rotated by withdrawal of said bolt from said detent, to bring the groups of peripheral teeth

in contact with said metal spur and make and break an electric circuit, substantially as described.

2. In an electric-circuit breaker, the combination of the rotating disk A, having groups of peripheral teeth *a*, and provided with a detent, *a'*, and spring B, with the detent-engaging bolt G, having outer push-button, *g*, spring *g'*, and guide-blocks g^2 g^2, as and for the purpose intended, substantially as described.

ISIDOR KITSEE.

Witnesses:
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