To all whom it may concern:

Be it known that I, CHARLES E. BEDAUX, a citizen of the Republic of France, residing at Grand Rapids, in the county of Kent and State of Michigan, U. S. A., have invented new and useful Improvements in Call-Recording Apparatus for Telephones, of which the following is a specification.

The present invention relates to call-recording apparatus for telephones, and its object is to provide a device whereby one calling by telephone may record at the telephone called, the number of the calling telephone in case his call meets no response; and further, to provide such a device whereby the time of such call may be indicated.

The advantages of such a device are manifest; for thereby the person called may afterward ascertain the number of the telephone calling him during his absence, and the time of such call.

This object, and any other objects appearing hereinafter, including objects relating to details and economies of construction and arrangement, are attained by, and the invention finds preferable embodiment in, the illustrative structure hereinafter described and illustrated by the accompanying drawings, in which:—

Figure 1 is a front view of a portion of a telephone to which my call-recording apparatus is applied.

Fig. 2 is a sectional view of the same taken on vertical planes corresponding to line A—A of Fig. 1;

Fig. 3 is a fragmentary detail view showing the operative engagement of my apparatus with the bell clapper of a telephone;

Fig. 4 is a side view showing the mounting of the lever which operates the marker of my apparatus;

Fig. 5 is a side view in section of the mounting of the marker;

Fig. 6 is a view of the cylindrical markable element, and connected parts, the middle portion being broken away;

Fig. 7 is a left-hand end view of the same with the call-time indicator;

Fig. 8 is a right-hand end view of said markable element;

Fig. 9 is a view of the circular bar on which the markable element travels and rotates;

Fig. 10 shows an open socket which receives and supports the left-hand end of said member;

Fig. 11 shows a socket which receives and holds the right-hand end of said member;

Fig. 12 is a view of a modification of my apparatus, wherein the marker is carried directly by the bell clapper, the position of the markable element being indicated;

Fig. 13 shows diagrammatically the movement of the marker on the markable element; and,

Fig. 14 shows the marks made by the marker.

In the embodiment of the invention chosen for detailed description in the body of this specification and for illustration by the drawings, my apparatus comprises a frame 1 which carries the moving parts and which is attached as by screws 2 to the face of a telephone 3 of common form. A markable element adapted to be marked by a marker, as hereinafter explained, is movable relatively to such marker. This markable element and marker may be constructed, and their said relative movement may be effected in various ways, preferably as follows: A non-rotatable circular bar 4, having a threaded portion 5 is horizontally and removably mounted at its right-hand end in a socket 6, and at its left-hand end in an open socket 7 in said frame. A cylindrical markable element 8 is rotatably mounted on and concentrically with the bar 4, and is provided at its right-hand end with a pivotally mounted half nut 9 spring-pressed at 10 into operative engagement with the threaded portion 5 of the bar. The markable element may have a complementary other half nut 11 as shown in Fig. 6. The markable element is provided at one end with a concentric gear 12 whereby the markable element may be rotated by a long pinion shaft 13 driven, as through its gear 14, by suitable clockwork indicated at 15. It is evident that as this pinion is rotated (the nut engaging the threads 5) the cylindrical markable element is thereby given a combined rotary and axial movement from the position shown in Fig. 1 toward the left-hand side of said view. This markable element is adapted to be marked during this movement by a marker, as the pencil 16, which is operated by the movement of a movable member of the calling apparatus.
of the telephone, as the bell clapper 17 which rings the call bells 18.
Such operation of the marker by a movable member of the calling apparatus may be effected in various ways: Preferably the arm 19 of a lever 20 fulcrumed on the frame, is bifurcated as shown in Fig. 3 to straddle the shank 21 of the bell clapper 17 so that the vibration of the clapper swings the lever 19 in a plane parallel with the bar 4. The other arm 22 of the lever carries the marker, which during the travel of the markable element moves relatively thereto as shown in Fig. 13; but inasmuch as the vibration of the marker is much faster than the movement of the markable element, the marks made on the markable element resemble those shown in Fig. 14.
A modification is shown in Fig. 15: In this construction the marker 23 is carried directly by the clapper 24, and spring-pressed at 25 in a socket 26 horizontally, and marks the markable element 27 which is mounted in front of the bell 28 and is constructed and operated as shown in the other views.
A screw 29 is provided for nicely adjusting the fulcrum bearing of the lever 20, as shown in Fig. 4.
The marker 16 is preferably seated slidably in a socket 30 of the lever arm 22 and is spring-pressed at 31 against the markable element, the tension of the spring being adjusted by a screw 32.
A time-call indicator displaying time characters, as the hour figures 33, is employed to indicate the time the recorded call was made. This indicator is preferably a belt 34 carried by rolls 35, 36, rotatable as belt 34, 35, on the arms 37, 38 rotatably mounted on the hubs 39, 40 of the markable element.
Weight portions 41, 42 depending from the arms 37, 38 near their bearings, serve to maintain such arms in horizontal position. It will be seen that the time characters being properly spaced with reference to the movement of the clockwork, the band may be adjusted so as to bring the time character indicating the then time of day into registration with the position of the marker, and that thereafter the position of any marking made by the marker will register with the character on the indicator showing when the marking of the recorded call was made.
A system of markings by dots and dashes being predetermined, the person calling may by pressing the call button of his own telephone record on the markable element of the called telephone, the proper combination of dots and dashes which indicates the number of the calling telephone.
When the markable element, which may be of such material that the marks thereon may be erased, as celluloid, has reached the limit of its axial travel, it may be returned to its initial position by raising the half nut 9 from engagement with the threads 5.
The call-recording apparatus may be readily attached to a telephone of common form by slipping the bifurcated end of the lever arm 19 around the shank 21 of the bell clapper and securing the apparatus to the telephone as by the screws 2.
The invention being intended to be defined solely by the claims, is not to be limited to or by details of construction shown or described.
I claim:
1. In combination with a telephone provided with calling apparatus having a movable member, a device of the character described comprising a marker with which said member is operatingly connected, and a markable element movable relatively to the marker and adapted to be marked thereby.
2. In combination with a telephone provided with calling apparatus having a bell and bell clapper, a device of the character described comprising a member in engagement with and movable by said clapper, a marker operable by the movement of said member, and a markable element movable relatively to the marker and adapted to be marked thereby.
3. In combination with a telephone provided with calling apparatus having a bell and bell clapper, a device of the character described comprising a lever swinging by said clapper, a marker carried by the lever, and a markable element movable relatively to the marker and adapted to be marked thereby.
4. In combination with a telephone provided with calling apparatus having a bell and bell clapper, a device of the character described comprising a frame adapted to be attached to the telephone and carrying a member adapted to be engaged by and in such engagement to be moved by said clapper, a marker operable by the movement of said member, and a markable element movable relatively to the marker and adapted to be marked thereby.
5. In combination with a telephone provided with calling apparatus having a movable member, a device of the character described comprising a marker with which said member is operatingly connected, and a cylindrical markable element adapted to be marked by the marker and having a combined rotary and axial movement.
6. In combination with a telephone provided with calling apparatus having a movable member, a device of the character described comprising a marker with which said member is operatingly connected, a cylindrical markable element adapted to be marked by the marker and having a gear, a screw on which the markable element is threaded.
mounted, a driving pinion in mesh with the gear, and clockwork adapted to rotate the pinion.

7. In combination with a telephone provided with calling apparatus having a call bell and bell clapper, a device of the character described comprising a member in engagement with and movable by said clapper, a marker operable by the movement of said member, a cylindrical markable element adapted to be marked by the marker and having a gear, a screw on which the markable element is threadedly mounted, a driving pinion in mesh with the gear, and clockwork adapted to rotate the pinion.

8. In combination with a telephone provided with calling apparatus having a moveable member, a device of the character described comprising a marker with which said member is operatingly connected, a cylindrical markable element adapted to be marked by the marker and having a combined rotary and axial movement, clockwork adapted to thus move the markable element, and a call-time indicator displaying time characters and movable with the markable element in its axial travel into the position wherein the marker registers with a said character indicating the time of the marker's operation as regulated by the clockwork.

9. In combination with a telephone provided with calling apparatus having a moveable member, a device of the character described comprising a marker with which said member is operatingly connected, a cylindrical markable element adapted to be marked by the marker and having a combined rotary and axial movement, clockwork adapted to thus move the markable element, and a band displaying time characters and carried on rolls movable with the markable element in its axial travel into the position wherein the marker registers with a said character indicating the time of the marker's operation as regulated by the clockwork.

In testimony whereof I have hereunto set my hand, in presence of two subscribing witnesses, at Grand Rapids, Michigan, this 23rd day of September, A. D. 1916.

CHARLES E. BEDAUX.

Witnesses:
Cyrus W. Rice,
Ganson Taggart.