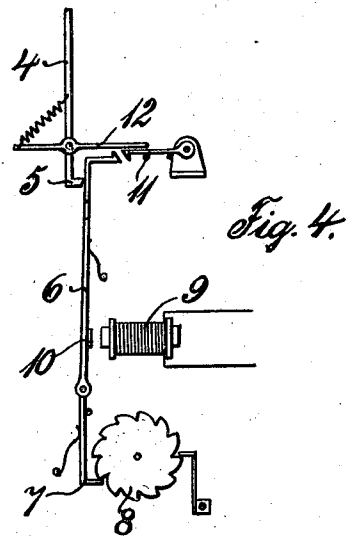
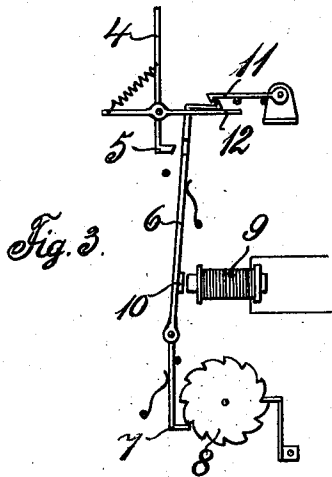
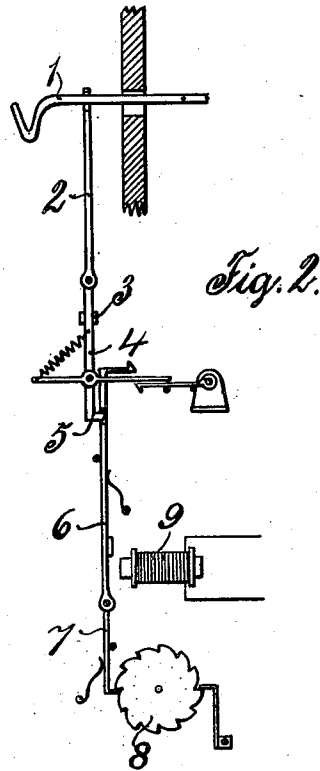
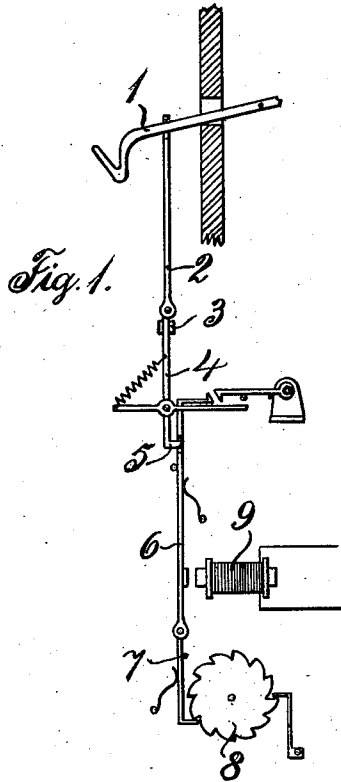


K. BORN.
CONVERSATIONS COUNTER FOR TELEPHONES.
APPLICATION FILED DEC. 20, 1910.

1,014,634.

Patented Jan. 16, 1912.



Witnesses.
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CONVERSATIONS-COUNTER FOR TELEPHONES.

1,014,634.

Specification of Letters Patent.

Patented Jan. 16, 1912.

Application filed December 20, 1910. Serial No. 598,369.

To all whom it may concern:

Be it known that I, KURT BORN, a subject of the King of Prussia, residing in Kreuzburg, Upper Silesia, Germany, have invented certain new and useful Improvements in Conversations-Counters for Telephones Without Crank-Handles, of which the following is a specification.

This invention relates to an apparatus for counting and registering telephone conversations and it particularly concerns telephones which have no crank-handle.

The apparatus is designed to count the conversations of the caller.

In the accompanying drawings the improved apparatus is shown by way of example.

Figure 1 represents the apparatus mounted on the caller's telephone. The apparatus is shown in normal position. Fig. 2 shows the positions of the various parts of the Fig. 1 in operation. Fig. 3 shows the part of the apparatus which is connected with the receiver's telephone, the apparatus being in normal position. Fig. 4 represents the working position of the apparatus shown in Fig. 3.

The improved apparatus is constructed as follows:—A traction rod 2 is mounted with its upper end on the hook 1 of the telephone receiver. This traction rod 2 is hinged with its lower end to the upper end of the connecting rod 4 guided in the guide piece 3. This connecting rod terminates in a hook 5 which engages with a recess of a traction rod 6. At the lower end of the second traction rod 6 a pawl 7 is hingedly mounted which engages with the teeth of a toothed disk 8 serving as driving wheel for the counting and registering apparatus of any of the well known constructions and which is not represented in the drawing. An armature 10 is fixed on the traction rod 6. The electromagnet 9 of the armature 10 is electrically connected with the call bell of the apparatus. The upper end of the traction rod 6 is bent at right angles and adapted to engage with a catch lever 11. With the connecting rod 4 a lever 12 is pivotally connected which serves for releasing the traction rod 6 from the catch lever 11.

The device operates as follows:—When the telephone receiver is taken off the hook

1, this hook swings upward whereby the driving wheel 8 of the counting and registering apparatus is moved for the space of one tooth owing to the connection 2, 4, 5—6, and 7. If however the telephone apparatus is being called, the current flowing to the call bell excites the electromagnet 9 which attracts the armature 10 whereby the traction rod 6 is moved to the right. This traction rod is thus brought out of connection with the hook shaped end of the connecting rod 4 and its hookshaped bent end slips under the catch lever 11 which maintains the traction rod 6 in this position. If hereafter the receiver is taken off the hook 1 the upper bent end of the traction rod 6 is automatically released from the catch lever 11 through the intermediary of the horizontal lever 12 of the connecting rod 4.

I claim:—

An improved device for the registering of telephone conversations comprising in combination with the hook-lever of the receiver of the telephone, a traction rod mounted upon said hook lever at its upper end, a connecting rod, properly guided, hinged with its upper end to the lower end of said traction rod, a second traction rod, having a recess near its upper end, the bent end of the connecting rod engaging with said recess, a pawl hinged at the lower end of the second traction rod, a toothed wheel, the counting and registering apparatus driven by said toothed wheel with which said pawl engages, an electromagnet electrically connected with the call bell of the telephone, an armature fixed to the second traction rod opposite said electromagnet, a horizontal hook at the upper end of the second traction rod, a catch lever for retaining said hook when the traction rod is being attracted by the electromagnet and a horizontal lever pivoted to the connecting rod for releasing the hook of the second traction rod from the catch lever, substantially as described and shown and for the purpose set forth.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

KURT BORN.

Witnesses:

LOUIS TARTS,
ERNST BLUSOP.