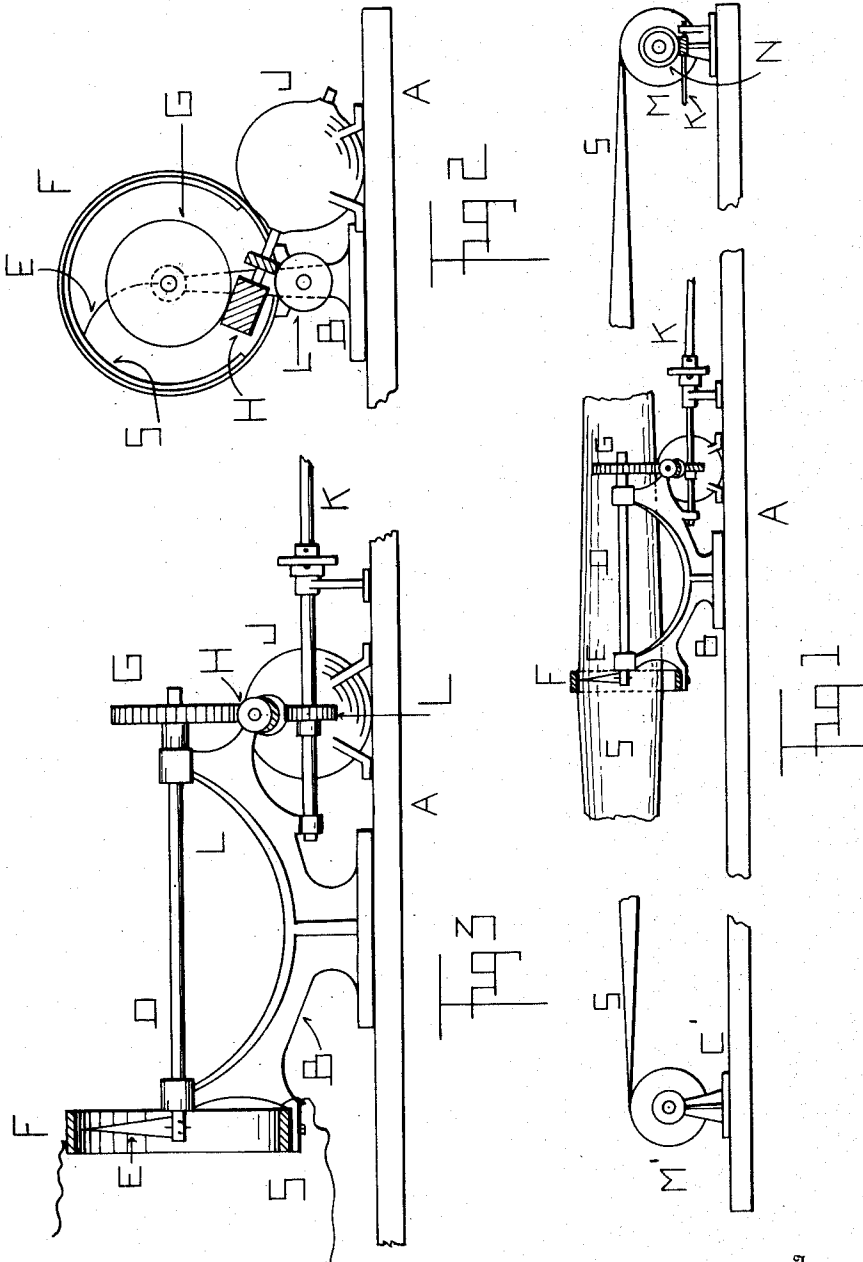


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WEB MESSAGE RADIO
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UNITED STATES PATENT OFFICE.

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WEB MESSAGE RADIO.

Application filed May 5, 1925. Serial No. 28,225.

This invention relates to the transmission and reception of written messages, by radio and by wire, and has for its principal object means for obtaining an automatic and continuous operation, as, for example, in the transmission of news copy.

With this and other objects in view the invention consists in the novel details of construction and combination of parts more fully hereinafter disclosed and particularly pointed out in the claims.

In the drawings Fig. 1 is an elevation, and Figures 2 and 3 enlarged views of details, in all of which like parts are indicated by like symbols.

A is a long base, near the middle of which a frame B is mounted; with roll-supporting frames C and C' at either end (Fig. 1). Frame B (Fig. 3) carries a shaft D upon one end of which a spring blade E is mounted, inside the ring F. Upon the other end of the shaft D is a gear G, engaged by a worm H on the shaft of a motor J.

The motor also rotates a shaft K through the gears L. The outer end of shaft K (Fig. 1) drives the drum M through the worm and gear N.

The drums have wound thereon the paper web or strip S (Fig. 2), which is curved into a partial circle in order to pass through the ring F (Fig. 2). That the paper strip is not a complete circle inside the ring F allows it (the strip) to clear the frame, motor shaft, etc.

The rotation of the motor not only sweeps the blade E around the inside of the curved paper strip, but the strip is advanced longitudinally simultaneously at a relatively slow rate.

The ring F is insulated from the frame B, and is one of the terminals of an electric circuit, the other terminal being fastened to the frame B.

Now if the paper web or strip S is charged with a potassium iodide, silver bromide, ferricyanide, or other electrolytic substance the passing of an electric current therethrough from the blade E to the ring F will discolor, or mark, the paper at that point.

If then the blade E sweeps the surface of the curved paper strip while electric current signals are passing, the paper will be marked in different places; and if these signals have an intelligible order, then a message is written on the strip. Of course, the continuous slow longitudinal movement of the paper

strip permits a continuous record thereon, limited in duration only by the length of the strip.

Consideration of the subject discloses that there is a two-directional relative movement between the strip and the marking member, i. e., transverse and longitudinal, the transverse movement being, say fifty to a hundred times per inch of the longitudinal movement.

As the subject is now so widely understood, further detailed description is probably unnecessary.

What I claim, is—

1. The combination of a flexible strip, means for moving it longitudinally, means for transversely curving a portion of said strip to more than one hundred and eighty degrees of a circle, and means for laterally traversing the curved portion of said strip with a marking means a plurality of times per longitudinal inch of said strip.

2. The combination of a flexible strip, means for moving it longitudinally, means for transversely curving a portion of said strip for more than three-fourths of a circle, means for laterally traversing the curved portion of said strip with an electric terminal contacting member a plurality of times per longitudinal inch of said strip.

3. The combination of a flexible strip, means for moving it longitudinally, means for transversely curving a portion of said strip into substantially a circle, means for laterally traversing the curved portion of said strip with a contacting member a plurality of times per longitudinal inch of said strip.

4. The combination of a flexible strip, means for transversely curving a portion of said strip into substantially a circle, means for repeatedly traversing the curved portion of said strip with a marking member in the same direction transverse of said strip, and means for producing movement between the marking member and the strip in a second direction longitudinal of the strip.

5. The combination of a receiving strip, means for producing longitudinal movement of said strip, means for repeatedly traversing said strip in a single transverse direction, said means comprising contact means moving at a constant rate and having a period of contact with said strip greater than half the period between traversals.

6. The combination of a base member, a

conducting ring mounted upon said base, a flexible strip having a width greater than one-half the circumference of said ring, said strip being curved transversely and threaded through said ring, and a contact member mounted to rotate within said ring and traverse said strip transversely.

3 7. The combination of a base member, a
conducting ring mounted upon said base, a
10 flexible strip having a width greater than one-half the circumference of said ring, said strip being curved transversely and threaded through said ring, and a contact member mounted to rotate within said ring and traverse said strip transversely, and means for 15 producing longitudinal movement of said strip through said ring.

In testimony whereof I have affixed my signature.

CHARLES FRANCIS JENKINS.