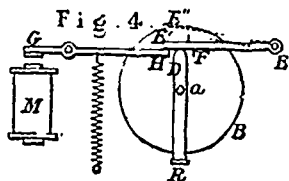
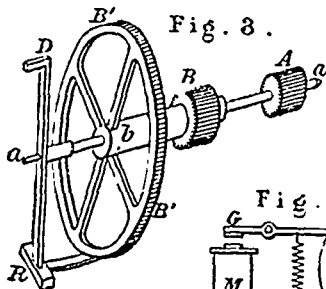


FIG. 5.



D'ARLINCOURT'S AUTOGRAPHIC TELEGRAPH.

Among the most interesting of the science exhibits at Vienna was the autographic telegraphic apparatus exhibited by M. L. d'Arlincourt, the following description of which we extract from *Engineering*. It consists of two cylinders revolving synchronously, and covered respectively with sheets of chemically-prepared paper and tin-foil. On the latter the despatch to be sent is written with insulating ink; the passage of the current determines on the former an electro-chemical tracing, which is an exact reproduction of the message.

This instrument is shown in the accompanying perspective view, and also in Fig. 1. These two differ from each other only in some details relating to the synchronous mechanism, especially the substitution of a coiled spring for the metallic rod or diapason.

The method by which the isochronous movement of the transmitting and receiving portions of the apparatus is secured, is novel and ingenious. Instead of the conical pendulum of Meyer's apparatus, M. d'Arlincourt regularises his trains of wheelwork by metallic rods; not, however, in using their rectilinear but their circular vibrations; and the synchronism of the rods being once established, it is maintained by the instrument itself. The error which may glide in cannot in any case be considerable, as the corrective action takes place at every revolution of the cylinders. One of these—the transmitter—is automatically brought to rest, in which state it must remain until a current from the receiver releases a little