

the apparatus be taken to the bedside or clinic room. The first object which confronts the purchaser, however, is how large a coil should be bought? For all ordinary purposes a six to ten inch is sufficient; it also must be decided whether a direct or alternating current is to be used for the primary circuit or battery. I should recommend the direct current in the form of a movable battery. A necessary accessory to the coil is a vibrator or rotary interrupter; both work satisfactory, but a rotary interrupter run by a small motor is to be preferred, as more even interruptions are thereby obtained, which is conducive to better Röntgen ray production. A rheostat should be used to control the current supplied to the primary of the induction coil, as, if too strong a current be passed to the coil, it is very liable to be burnt out and consequently ruined. If the coil be immersed in oil it is not so easily short-circuited, and will give the purchaser more service.

*Tesla Transformers.*—Mr. Tesla has devised a coil which develops static electricity, and may be attached to a direct or alternating current, and consequently may be connected to any of our electric light currents. Mr. Tesla claims that, with an ordinary incandescent lamp, his coil may be used in place of the ordinary static machine in the treatment of various diseases. Unfortunately, the coil is not manufactured at present, but Mr. Tesla informs me, however, it will be in the course of a few months. Such an apparatus would be very useful, as it could be carried very easily to the bedside or the clinic room, where electricity or a small battery is at our command without the slightest inconvenience, as the whole apparatus would not weigh over twenty pounds.

Many names have been given to the pictures taken in conjunction with the Röntgen ray. The following is a partial list: Cathode-photography, shadowgraphy, radiography, cathography, photography, electrography, fluorography, skiagraphy and rontography. There are two methods whereby this picture is taken: (1) by putting the object which is to be shadow-photographed between the sensitive plate and the Crookes' tube; (2) by having a fluoroscopic screen and putting the object between this screen and the Crookes' tube, and then with a camera take the picture of the image or shadow which appears on the screen.

You will observe that in either case we do not get a photograph of the object itself, but a photograph of the shadow of the object is produced; therefore, I have designated the word shadow-photography, which is self-explaining, and is an appropriate word to use in conjunction with this part of the Röntgen ray work. In giving a description of shadow-photography the process is identical, whether a small or large