This invention relates to a new and improved method of and device for keeping in moist condition the receiving paper of an apparatus for electrically receiving pictures.

It has been well-known heretofore to make a broken tone reproduction of a picture by means of a broken coating of insulating material on a metal plate. When a needle having a fine point was connected to one terminal of a source of electric current, while the other terminal of the said source of electric current was connected to the metal plate, and the said needle was moved across the broken coating of insulating material, then the electric circuit was closed when the needle contacted with the metal plate and it was broken when the needle contacted with a spot or portion of the insulating coating.

In this manner the light and dark effects of the picture were transformed into a series of electrical pulses. It was also well known to move a second needle in synchronism with the first needle, across a sheet of chemical paper moistened with a suitable solution.

The receiving needle, which was moved across this paper, and the drum or support upon which the chemical paper was mounted, were adapted to receive electrical impulses corresponding to those transmitted by means of the broken tone plate, so that the solution with which the chemical paper was impregnated was decomposed by the passage of the pulses of electric current to produce spots of color corresponding to the original picture.

In devices of this character the chemical paper dried rather rapidly so that if long pictures were transmitted the end of the picture was not reproduced as well as the beginning of the picture.

One of the objects of this invention is to provide new and improved means for keeping the receiving paper moist for a sufficient length of time to enable a long picture to be received.

Another object of this invention is to provide a new and improved solution for impregnating the chemical paper.

Other objects of the invention are set forth in the following drawing and description which shows a preferred embodiment thereof.

The drum 49 is made of any suitable metal and an absorbent pad 50 is located thereon. This absorbent pad 50 is made of a pure unsized paper consisting practically of pure cellulose. The receiving or chemical paper 51 is placed upon the pad 50. Both the pad 50 and the receiving paper 51 are saturated with a solution which can be decomposed by an electric current. This solution is preferably an aqueous solution of starch or dextrin, and it also contains potassium iodide and potassium bromide. The effect of the addition of the potassium bromide is to secure markings of a brownish tone upon the receiving paper 51 with which the receiving needle N contacts. Because of the use of the absorbent pad 50 the absorbent receiving paper can be kept in a suitable moist condition for many hours, if necessary. The needle N is mounted upon a blade spring 42 and this has at its outer end a member 45 which can be held in the inner sleeve 43 by means of the screw 45. The sleeve 48 slides within an outer sleeve 44 and it can be held in position by means of a screw 47. The drum 49 and the needle N receive the electrical pulses corresponding to the original picture so that brownish markings are formed upon the receiving paper 51. It is preferred to form the picture upon the receiving paper 51 of one-half the size of the picture which has been transmitted so as to prevent the picture formed upon the paper 51 from having a coarse or graincd effect.

In addition the lines formed upon the receiving paper 51 spread out slightly so as to practically neutralize the broken tone effect. Hence a picture formed upon the receiving paper 51 can be directly copied by the ordinary processes of photo mechanical printing.

A preferred embodiment of this invention has been described but it is clear that numerous changes and omissions could be made without departing from its spirit.

We claim:

In an apparatus for electrically receiving pictures, the combination of a conductive support adapted to be directly associated with a recording needle, an absorbent pad connected to said support and having the
receiving paper located thereon, said pad and said receiving paper both containing a conductive solution adapted to be decomposed under the action of an electric current, so that any current which passes from said needle to said drum passes through both said receiving paper and said pad.

In testimony whereof I hereunto affix my signature.

JOSEPH WISSMAR.

In testimony whereof I hereunto affix my signature.

MARVIN FERREE.

JOSEPH WISSMAR.