

# THE PHOTOGRAPHIC NEWS.

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### REVERSED NEGATIVES.

NEARLY all the photo-mechanical processes at present in use require that the negatives from which the plates or blocks are produced shall be reversed. Take the case of the most simple of all these processes, the well-known method of producing blocks from line drawings which is employed for the illustration of so many periodicals. The original drawing is reproduced line for line just as it came from the artist's pen, and the first operation in the reproductive process is to obtain from it a reversed negative. This is almost universally done by fitting the hood of the lens employed with a mirror, so that during the process of copying the original drawing faces the side of the camera. Such a method of procedure, associated with an electric arc lamp, is perhaps the most convenient and perfect manner of obtaining a reversed negative. But it entails the use of extensive plant, which only those who devote themselves to this class of work can command. The every-day photographer cannot hope to compete with such workers, but he may be often so placed that a reversed negative is required quickly, and he has to depend upon his own resources to produce it. What is the best way of setting about the work?

The simplest method of all is undoubtedly the use of a celluloid film for the original negative, for both sides of it can be printed from, one side obviously giving a reversed image. But films are not in common use for studio work, nor are they likely to be used by professional hands, for their chief advantages, lightness and reduction of bulk, disappear when the operator is at home in his own quarters. Certainly, there is the further advantage of freedom from breakage to be considered, but this almost disappears in studio work, for the hand becomes so accustomed to deal with the fragile glass that a plate is as seldom broken as an egg is by the mother hen. Besides, films are much more costly than glass, and require greater care in development, and these facts, added to the other difficulties which we have enumerated, make the pro-

fessional photographer still dependent upon glass plates for his every-day work.

Many a satisfactory reversed negative has been made by the simple expedient of putting the dry plate in the dark slide with its sensitive surface turned away from the lens, and this is the plan which we should recommend when only an occasional negative of this kind is required. But to attain the best results several little precautions are necessary, and non-observance of one of them may utterly ruin an otherwise perfect picture. To begin with, the plate must be carefully cleaned on the glass side, so as to get rid of those patches of stray emulsion which seem to be so dear to the average plate-maker, and which form an admirable example of "matter in the wrong place." This is a risky thing to do in the limited light of the dark room, but perhaps the best means to employ for the removal of the obnoxious gelatine is a damp sponge which is just dipped in fine pumice powder. It is best only because it is quick, and the quicker such an operation is, the better. Next, the thickness of the glass must be measured with a pair of callipers or compasses, another plan being to take a hasty impression of the edge of the plate with a piece of wax or tinfoil. The object of this measurement is to gauge the exact distance which the plate must be moved from the lens after the image is focussed, for, unless the thickness of the glass be thus allowed for, the picture must of necessity be blurred. One more little matter has to be attended to. The spring at the back of the dark slide must be prevented from scratching or pressing unduly upon the sensitive film, and perhaps the best way to prevent this is to back up the plate with a velvet-covered card. The exposure need not be more than the normal, for the thickness of glass through which the light has to travel before it reaches the film does not make any appreciable difference.

So far, provided that the matters to which we have called attention are seen to, all is plain sailing, and success is within reach. It is the development which will try the operator's skill. Not that any particular