

*The Praxinoscope of M. Reynaud.*—This is a mechanical toy on the same principle as the phenakistiscope, the zootrope, the bioscope, &c., wherein the rapid movements of a series of pictures represent the different phases of some living action on the retina and the illusion of actual movement. M. Reynaud has improved his instrument so as to be able to project the images on a screen, thus making the motion visible to a large number of persons at once. All the objects in their different positions are, however, drawn by hand, and there seems to be room here for the application of photography. Mr. Bridge has succeeded in taking fourteen different and successive views of the phases of action of an acrobat in executing a somersault. Why cannot such a series be applied to the praxinoscope? In the same way the successive action of any other object in motion could be reproduced by photography, and the realisation of the idea would be a new means of developing photographic industry.

*Different Methods of Flowing Gelatine on Glass.*—Small beginnings often give rise to big results. M. Andra recently pointed out a method of causing gelatine to flow readily over glass by first coating the latter with a solution of sugar in water, and then sponging it off and rubbing the glass quite dry with a linen cloth. M. Laurent, of Madrid, has now repeated this experiment, and has found that by submitting the plate coated with sugar to the steam of boiling water, the gelatine will then flow perfectly. Silicate of potash poured over the surface of the plate has also been recommended for this purpose, and Mr. Henderson some time ago suggested silicate of soda. It remains to be seen whether with these later methods it is as easy to reverse the negative as in that where simply sugar is used.

*Photographs of Interiors.*—Apropos of these experiments of M. Laurent, the same gentleman has, by means of M. Stebbing's pellicle, produced some views of the interior of Seville Cathedral and of other churches, such as have never been previously equalled in photography. These prints, which I have myself had an opportunity of inspecting, are 30 by 40 centimetres, and are as perfect as can be wished for. Here is an answer to those who assert that we have attained quite sufficient rapidity in photography. Reproductions such as these prove that we cannot attach too much importance to the ability to reduce the length of exposure. There are plenty of means of decreasing the rapidity when we have attained it, but when it is wanted it is impossible to secure it.

*Employment and Solubility of Salicylic Acid.*—The property which salicylic acid possesses of preventing decay in organic substances is not sufficiently taken advantage of. A few drops of this acid added to a solution of gelatine in water makes it keep admirably. I have kept such a solution for from eight to ten months without observing the least sign of putrefaction. Care only must be taken not to employ the acid in cases where the gelatine has to come into contact with ferric chloride, as it produces a violet tinge which would be, as a rule, ruinous to the effect which it is intended to obtain. Perchloride of iron can be used as a test of the presence of salicylic acid in any substance, to which it has been added as an antiseptic, by means of the violet tint which has just been mentioned. If the acid be introduced into an emulsion of gelatino-bromide, though it will not affect the sensitiveness or quality of the emulsion, it will be immediately detected by the light red colour produced in the film at the moment of development with oxalate of iron. Its use must, therefore, be avoided when the organic substance, towards which it acts as an antiseptic, is to be treated with a salt of iron. Sulphate of iron itself produces a purple colouration. Salicylic acid is sparingly soluble in water, but much more soluble in alcohol. I give here some information on this point which it may be found of service to note:—

1 litre of water dissolves at 0° C.	1.50 grammes of the acid.
" " 15°	2.25 "
" " 30°	3.90 "
" " 55°	9.80 "
" " 90°	51.80 "
" " 100°	79.25 "

Cold alcohol will dissolve a quarter of its own weight of acid. Hot glycerine dissolves 12.5 grammes of salicylic acid per litre. According to the above table of solubility of the substance of which I am writing, it appears that a litre of water at the normal mean temperature of 15° C. dissolves 2.5 grammes of acid, and this shows that a solution of an organic body can be quite saturated without introducing any large quantity of this energetic antiseptic.

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## Correspondence.

### THE PAYMENT OF ASSISTANTS.

SIR,—In the discussion relative to the above subject at present appearing in the PHOTOGRAPHIC NEWS, I think "An Operator of Six Years' Standing" is being somewhat harshly dealt with at the hands of some of the correspondents for his temerity in requesting advice. He asks for beef, and they give him mustard. Doubtless he is only dabbling in one of the many narrow streams tributary to the great river of photography, unfathomed yet, at least in its mid-channel of chemistry, by even our master minds of science; but he acknowledges his lack of skill, and a fault confessed is half atoned for.

"H. B.," writing on the subject, declares that from experience he can vouch that from £2 to £3 is the sum paid weekly to competent assistants; but—

"Moves our free course by such fixed cause  
As gives the poor mechanic laws?"

Indeed, no; the merit of a photographic assistant, like water, must find its level; with of course the usual exception to the rule, the only limit to an employe's pay is his worth to his employer, unless they are as a lot underpaid, and I think that this supposition is sufficiently repudiated by the salaries already enumerated in the NEWS.

There are many persons as well as artists who *paint* "pictures," and so there are photographers and photographers. I consider that one man has about the same chance of practically working photography successfully, as a builder has of erecting a house, undertaking the duties of masons, joiners, painters, and all their satellites, by himself. The attempt is often made in our business, certainly; but how different the results from those that characterise the work of our leading studios, where each man is adapted to and employed only in a particular duty!

Negative operating, which, in the true sense of the word, means scientific art, exacts three essentials from its devotee before it will become really subservient to him; these are: natural capacity, perseverance, and opportunity.

I would advise "An Operator of Six Years' Standing," or, indeed, any other photographic student, to first gain a good general knowledge of the business, and meanwhile endeavour to form an unbiassed opinion as to which particular branch his capabilities are most suited to, then "nail his colours to that mast;" bestow all his attention to it, at once if possible—if not, make it his goal that he must ultimately reach, remembering that general assistants are simply, figuratively speaking, "jacks of all trades," and make the large class who receive only from 20s. to 40s. weekly.

And independent of technical skill, there is one other primary point which is only too often neglected. "Men cannot be all born geniuses," says John Bright, "but there is one thing within the power of you all which raises you to the level of a hero—that is, to do your duty." I should recommend employes to take these words to heart; pause over them. They should remember that they can