

be amiss, as by its means the gelatine, as you see, still remains in the transfer and favours the "grip," which is so important in transferring to the stone. There is a transfer here that does not possess this quality, and it is very liable to be damaged through slipping, &c., while pulling through the press. It was prepared without the chrome alum, and the gelatine is all consequently washed away. There are, of course, other methods for obtaining the tackiness, but the one selected works all right.

A DEFENCE OF COLLODION.

BY J. F. COONLEY.*

I HAVE never been possessed of sufficient penetration to be enabled to discover the great advantages, or of sufficient discernment to see the beauties, claimed by the admirers of the new or gelatine process. That there are occasional fine results produced on gelatine plates I admit, but the proportion of such is very small in comparison with the failures, and attended with much vexation, time, and a great deal of uncertainty. But these are not its greatest drawbacks; if they were, they might possibly be overcome in time. There are other points to be taken into consideration, and an important one is the permanency or staying properties of the negatives. Men in our profession, and people in general, I think, are given to jumping hastily at conclusions, and often are ecstatic over a new thing before they have become acquainted with its properties or merits. They look only at the surface, and do not go down to the foundation. They take a superficial view, and adopt or advocate an article because it is new, whereas the proper course would be to weigh all of its possibilities and its probabilities, and when they have gone down to the root of it, they will be far better prepared to express a sound and correct opinion based on facts and reliable data.

I do not presume for one moment to think that there is a gentleman who is familiar with photographic manipulation that will not concede the probability of a successful wet plate worker becoming as expert in dry plates as any now engaged in making that kind of negative. I am possessed of sufficient confidence in myself to think I could do so in a very brief period, and be able to show as good results as any I have seen. Perhaps, after working this process one or two years, I would do no better than at first, from the fact of being circumscribed, or hemmed in, as it were, by the material I should have to use. If it was good, all right; if it was bad, I would not be instrumental in making it so. The plate was not of my creation, and the element of success or failure was imbedded in its film when it was coated. If bad, no amount of care or exposure could make a good negative with it; if good, I am not entitled to any great credit for the result. In other words, I should be in the hands of others who, perhaps, are careless, dirty, or inaccurate, and be compelled to work whatever they gave me in return for so much money.

Gelatine plates are made by the manufacturers for the purpose of making money, and they are not throwing any large quantities of them away as imperfect, even were it possible to detect their imperfections before using. But time is valuable, and I am satisfied without going to the trouble or expense of demonstrating their imperfections—others have done that for me. I want something that is reliable, and is partly, if not wholly, a creation, or at least a compounding, of my own for making negatives. The non-keeping quality of gelatine negatives is to me a foregone conclusion, and for that reason alone, if no others existed, I would reject their use, except it be for some special purposes.

As to the collodion base for negatives, it is reliable and durable. If the negatives have not been treated with mercury or sulphuret of potassium for intensifying (which, by the way, is of very rare occurrence, and never used by any one understanding his business), they will make as fine prints years after they were made as at first, if treated with the same care and skill in printing; or, in other words, they retain all the printing qualities that they first possessed. So far they can be relied on. They have withstood the test of time, the severest test they will ever have to endure. This statement is beyond dispute, and I presume there is no one that will deny it.

On the other hand, how is it with negatives made on a gelatine base? From all the evidence I can procure, together with my observation and knowledge of the action of the ingredients in the combinations that are the component parts of the resulting negatives, I am of the opinion that it is an exception to find a gelatine negative a year old that will give the same quality of print as when first made. I also believe that most of them will decompose

* Read before the Association of Operative Photographers of New York.

and fade, becoming ghosts of their former selves, or else become so hard and intense that it will be impossible to get a print from them, to say nothing about spots from want of washing, stains, streaks, and other things for which no cause has been found, or, if found, has not been published that I am aware of. I believe the elements of decay are a part of the negative, and come into existence at the time the negative is completed; that they are accelerated by the action of either an intensifying or a reducing agent, both of which have to be extensively used—few plates yielding the proper printing quality without either strengthening or reducing their intensity. When this expedient has been resorted to, the time of their durability is limited, their death warrant has been signed, and it is only a question of a few months when the inquest will be held, and the remains, almost unrecognizable, be consigned to the acid or potash tank.

If proprietors of photograph galleries wish to accumulate a quantity of negatives made on a foundation so treacherous and uncertain, I suppose they have the privilege of doing so; but I am not surprised that, after a few months' trial, many of them have had good cause to regret their employment, and curse the day they were prevailed upon to adopt their use.

The materials of which they are composed seem to be beyond the power of any man living to reduce to an exact science. I have serious doubts if the man is forthcoming that will ever give us the directions to enable us to work them with the same success or with the fine results which collodion is capable of producing, or with anything approaching the same certainty. If a dry plate is ever made to do all that can be done with the wet collodion, with the advantages of rapidity, and have the keeping qualities, together with the same certainty and uniformity as to results, I believe the ingredient called gelatine will have to be replaced by something that is not of such a treacherous nature, and that can be relied on to work the same at all times, in all climates, and at all seasons of the year, if treated with the same knowledge and skill. That a plate of this kind may become one of the important discoveries of the future I consider probable. Until it does, or until more certainty, uniformity, and durability are combined in gelatine plates, I wish to be excused from using them or advocating their use.

PHOTOGRAPHIC EXPERIENCES IN EGYPT.

BY WILLIAM H. RAU.*

A FULL description of the Nile journey having already been written by Mr. E. L. Wilson, it would be superfluous for me to do so here, so I will simply touch on those photographic items that are new and out of the ordinary track of the photographer so far away from home, and attempt to enumerate briefly the difficulties encountered in the one thousand miles' journey down the Nile. The atmosphere of Egypt is clear and crisp, like that of Colorado and New Mexico. Distances are deceptive, and clouds very scarce south of Cairo. One can surely depend on a clear day, no matter when he starts out to work. Of course, with such an intense light as this, the shadows are equally intense, and the operator is apt to be deceived in the amount of exposure to be given. We always gave plenty of time to every exposure where it was possible to do so. Of course, on an expedition of this kind, where bad judgment and carelessness would involve the loss of many dollars, a clear head and previous experience are invaluable. The operator must never allow himself to be led at all away from what he knows is safe by some trifle that may occur, and that is apt to lead him off. Our exposures varied from an instantaneous up to twenty, and sometimes thirty minutes. Having taken passage on a Khedive's steamer, we were allowed ample time to visit all points of interest, but none too much to photograph the same: so, whenever it was possible to do so, we started with our donkeys and Arab carriers much earlier than other travellers, in order to gain time and not be molested by the crowd. The first temple on the Nile is that of Denderah, which was not many years ago entirely covered with dirt, on the top of which was an Arab village. The exterior view of the building was disappointing, as it is sunken in the dirt; its interior is entirely cleaned out, but is dark and yellow, its only light coming in from small holes in the roof, excepting the front hall, which is open out to the free air. We made a series of negatives all around this fine old temple, and when rapidly directed in our movements by Mr. Brugsch Bey, who guided us to the special points, so that no time was lost. The most difficult picture of any hue that we attempted was a piece of fine-coloured sculpture

* Continued from page 504, vol. xxvi.