

The strikingly suggestive experiments recently made by Dr. Waller may therefore be said to break virgin ground.

He starts with the simple device of passing a weak current through water in which a tadpole is swimming. The tadpole immediately wheels round and swims straight to the anode, moving, therefore, in the opposite direction to the positive current. There he stays quiet until the current is reversed, when he turns and crosses the bath, again swimming against the current.

This is the conduct of an average tadpole, but there are exceptions. In the following behaviour, however, all tadpoles are alike. A stronger current is passed, and instantly the tadpole turns so that his long axis points in the same direction as the path of the current. If his head happens to be turned towards the anode, so that the current traverses his spinal cord from head to tail, he lies perfectly still as if paralysed—he is, as Dr. Waller puts it, being stroked the right way. But if he happens to lie in the opposite position, the current passing through from his tail to his head acts as an irritant; it strokes him the wrong way, and he wags his tail vigorously. By getting two tadpoles to lie parallel, head to tail, and reversing the current two or three times, it is seen that the one which is being stroked the wrong way wags his tail, the other lies still. On reversal of the current the first one instantly stops, the other begins to waggle. Taking a trough full of tadpoles, moving leisurely and jostling each other in all directions, and passing a moderate current is even more interesting. "The commotion," says Dr. Waller, "is amazing; the tadpole community seems to have gone mad; a writhing mass is all that can be distinguished; but the disturbance does not take long to subside, and now all the tadpoles are fixed as if at attention, looking one way, heads to anode, so that they are traversed by a current from head to tail, stroked down the right way." It is a reflex adjustment of the animal to its environment effected through the agency of the nervous system; the most soothing position is forced on them by the excitation experienced in all other positions.

The effects of similar currents on the lowest forms of life, the protozoa, are equally instructive. If a drop of hay-infusion is traversed by a current, the whole crowd of paramocia turn their noses towards the kathode and swim towards it (with the current) in converging curves; in a few minutes they are thickly crowded round the kathode, and the rest of the fluid is quite cleared. On reversing the current the crowd breaks up and swims over to the new kathode. If the current is reversed at a moment when they are scurrying over at the top of their speed, they spin round and rush off the other way.

Ciliated infusoria, as a rule, agree with paramocia and swim with the current. Among flagellata, on the other hand, the custom is to swim the other way. If both are present they may be seen, in the absence of a current, swimming about in all directions, intermingling in the friendliest manner. Start the current, and now, says Dr. Waller, "two armies assemble at the two banks; ciliata to the kathode, flagellata to the anode! appears to have been their *mot d'ordre*; and now if you reverse the current the two armies put themselves in motion and appear as if precipitating themselves upon each other; but no disaster happens, the opposing crowds slip through each other and reassemble at the pole which they respectively affect."

Notes on Art.

THE PHOTOGRAPHIC SALON.

THE Photographic Salon at the Dudley Gallery bears, it is to be presumed, the same relation to the annual exhibition in Pall Mall, that the lamented Grosvenor was wont to bear to the staid Academy. In this favoured age we have New Fiction, New Women, New Art—it would be hard indeed if we could not find a home for our New Photography!

One's first impression of it is, that it is very New indeed. Glancing round, the first things that strike you are the true impressionist lack of focus, and a wild originality in the matter of frames.

A more careful scrutiny, and you modify your view; there is much excellent work here, yet such work as one could not imagine any gallery, however conservative, refusing to hang. I suppose it is in these frame questions that the parent show proves its rule so grievous: perhaps—awful thought—it insists on uniformity!

Now the main feature about the New Frame is that it is mostly green; and, in justice to its devotees, let it be at once stated, that the effect, especially in conjunction with carbon prints, is exceedingly happy. It gives a mellowness, with just enough contrast to show up the delicate tone of the photograph to its fullest extent. But it strikes me in a disagreeable way that the New Photographer is tricky. One artist—Mr. Hall Edwards—contributes a carbon head of a young man in a cowl, entitled, "The Novice." It is very strong and quite Rembrandtesque in its lighting, and the quality of the printing did not in the least stand in need of the adventitious relief it receives from being framed in a fragment of a tarred rail-fence, with all its ostentatious splinters!

Then there are tricks of paper. A texture is given to draperies and pottery, which is derived, not from the great ability of the sun to photograph it, but the cunning of the artist in printing it on rocky paper. My enjoyment of No. 1 in the catalogue—"Still Life," by Henry Kühn, was much disturbed by my inability to decide whether the dainty lines on the little Venetian glass vase were really there, or were merely an illusion of the printing. I am informed that at this exhibition it is lawful for the artist to touch up his prints to an unlimited extent; and this again, makes criticism difficult. Mr. Robert Demachy's work seemed to have been stippled all over, so that the photograph was merely a peg on which to hang a miniature. I do not know what are the morals of photographers in general on this head, but to me it seems to detract considerably from the artistic value of their work.

The most wonderful specimen here, is most certainly Mr. Ralph Robinson's "Why not be friends?" No. 59. A charming little girl sits on a doorstep with a small terrier on her knee, and a larger dog at her side. Approaching these from the other side is a cat, with every hair on its back erect with rage. The photograph is faultless in every detail—clear, luminous, happy, to a most wonderful degree. One can hardly realize that all those four pieces of vehement life were simultaneously still, even for a quarter of an instant.

Among a good many charming landscapes, Dr. Hugo Henneberg's "At the rushy pool," stands out in

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