

Mr. Fletcher spoke of his experience with the acetic acid mixture, recommended by Mr. Smith at Champaign last year. He found the mixture of equal parts, alcohol and acetic acid, not the best proportion, and had added 25 per cent. distilled water with good results. He exhibited a number of specimens in this liquid, perfect in colour and shape. For white larvæ he finds it especially good, preserving form and colour perfectly. In response to a question by Mr. Doran, he said the mixture was cheaper than alcohol alone.

Mr. Marlatt asked whether the mixture was not corrosive to the skin where it was freely used.

Mr. Smith replied that where the mixture contained less than 50 per cent. of acid it was harmless. Where the skin was broken it caused an itching or burning; but clear water readily cured that.

In answer to a question by Mr. Mann, he stated that the evaporation was not so great as with alcohol alone; but that there was a tendency to attack cork stopples. It does not touch rubber. The advantage in the acid was its effect in preserving form, preventing the shrivelling effect of the alcohol. The insects were just as good for study and the internal organs preserved as well as in alcohol. In reply to a question by Miss Claypole, he said that for spiders it was excellent.

Mr. Fletcher asked whether anyone had used Carbolic Acid as a preservative. He had been asked to collect butterfly eggs and to preserve them in strong carbolic acid.

Mr. Mann has used a very weak solution satisfactorily, and has found that there is very little or no evaporation of the liquid.

Mr. Howard asked whether the acid had any staining effect, and Mr. Osborn whether it did not shrivel material.

Mr. Smith had never noticed any staining effect. He uses the acid to clear specimens previous to mounting in balsam, and some material gets no other treatment save a soaking in the acid. He finds that it renders tissue transparent, and that a katydid placed in the strong acid became uniformly glassy so that it could be almost seen through. It stained no part of the internal structures. Removed from the acid and placed in alcohol the insect gradually became opaque as before. It does not seem to shrivel and does not destroy very rapidly as far as his experience goes.

Mr. Claypole said it had a bleaching effect.