tion of the behavior changes produced by bilateral lesions of the hippocampal system. It should be useful, also, when combined with food-maintained behavior in investigations of any variables that are considered to be related to the affectivity of the animals (*5*).

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References and Notes

1. This experiment is part of a research program carried out under contract G 919 between Boston University and the National Science Foundation, principal investigator, J. M. Harrison.
2. M. Sidman, *Science* **118**, 157 (1953).
3. B. F. Skinner and S. L. Campbell, *J. Comp and Physiol. Psychol.* **40**, 305 (1947).
4. B. F. Skinner, *The Behavior of Organisms, An Experimental Analysis* (Appleton-Century, New York, 1938).
5. C. B. Ferster, *Science* **120**, 269 (1954).

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Inexpensive Stain for Paper Electrophoresis

Bromphenol blue is an expensive dye, as one soon learns when doing large numbers of paper-strip electrophoresis determinations. Since light green SF can be used satisfactorily at less than 10 percent of the cost of bromphenol blue and, in addition, does not require washing with alcohol or preparation with mercuric chloride, its use may be attractive to others. In our hands the strips have proved to be the equal in all respects of those stained with bromphenol blue (*1*). Griffith (*2*) suggested that there were several stains of possible value in staining these strips; our best results were with the light green, although fast green may be used interchangeably (it is slightly more expensive).

A modification of the Grassmann technique (*3*) for paper-strip electrophoresis was followed using Whatman No. 3 filter paper strips ¾ in. in width. Serum was streaked across the base line using a hemoglobin pipette (20 mm^3). Barbiturate buffer, *p*H 8.6, was employed, and the strips were run overnight (approximately 15 hr) at 3.5 ma. After oven-drying for ½ hr at approximately 105°C, the strips were ready for staining.

A shallow glass dish large enough to allow the strips to lie flat (Pyrex baking dish) was used. Strips were first immersed 5 to 8 min in 1-percent acetic acid solution. The acetic acid enhances the adsorption of the proteins on the filter paper and minimizes their loss on developing (*4*). This original wash was saved. The strips were then immersed for 5 to 8 min in 1-percent light green SF dissolved in a 1-percent solution of acetic acid in distilled water. They were then washed with the original 1-percent acetic acid using gentle agitation for about 1 min. This was repeated three times, using fresh 1-percent acetic acid, a total of four washes. The final wash was allowed to remain on the strips 5 to 8 min with occasional agitation. Further handling of the strips depends on individual needs. Our strips were air-dried, cleared with mineral oil, mounted in 1-in. Scotch tape, and scanned with a Photovolt Densitometer Model 425

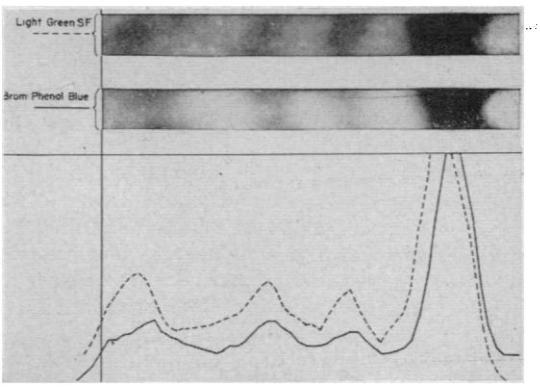

Fig. 1. Paper electrophoresis strips run simultaneously and stained by standard bromphenol blue technique (solid line) and light green SF (dashed line). Curves drawn from Photovolt Densitometer Model 425.

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References and Notes

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2. L. L. Griffith, *J. Lab. Clin. Med.* **41**, 188 (1953).
3. W. Grassmann and K. Hannig, *Naturwiss.* **37**, 496 (1950).
4. H. J. McDonald *et al.*, *Clin. Chemist* **5**, 51 (1953).

28 January 1955.

Our delight in any particular study, art or science rises in proportion to the application which we bestow upon it. Thus, what was at first an exercise becomes at length an entertainment.—JOSEPH ADDISON.