

struction of the standard carrier, the holder and the cells. The microcells were made with precision by drilling through the centers of the parallel surfaces on small identical brass disks. One of the parallel surfaces of the microcells was countersunk to hold the lower cover glass. By placing a cover glass over each parallel surface of the drilled disks, a microcell was provided with a fluid capacity of 0.06 cc. A cross-section of a microcell is indicated at *c*, in the diagram. A complete series of standards with any desired gradations may be distributed in the carrier. An automatic ball and spring stop, *h*, in the drawing, allows any standard to be stopped in the path of illumination.

The colored solutions and the blanks may, therefore, be interposed in the two light paths. The prism brings the light to a common axis. Looking into the telescope, the eye sees the divided field of the ordinary

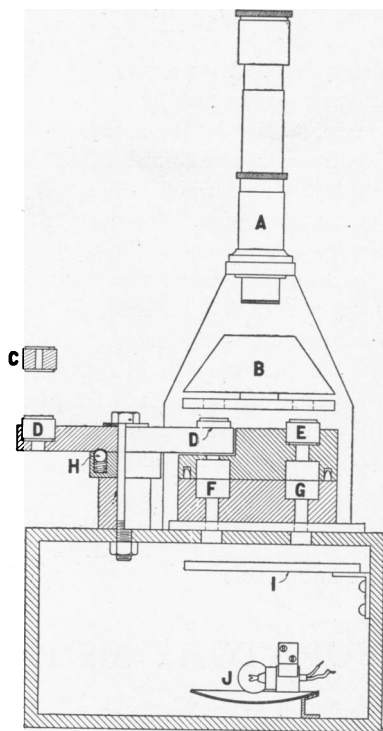


FIG. 1

colorimeter, and sharp color differentiation is possible. By moving the standard carrier, the value of the unknown solution may be approximated or matched with considerable accuracy.

Obviously, glass or bakelite cells, similarly constructed, may lend themselves to better adaptation for general colorimetric analysis than cells constructed from metal.

The arrangement of four cells in two combinations

which allows the transmitted light to pass through parallel surfaces is, so far as we are aware, a new application in colorimetry. Simplicity of construction, ease of operation, wide possible application and reasonable accuracy when dealing with small quantities of solution justify the use of the new colorimeter. It is felt that the sacrifice of the usual vernier gradations is compensated for by the applicability to exceedingly small volumes of solutions.

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AN EASY WAY TO REDUCE ELECTRIFICATION OF PARAFFIN RIBBONS¹

IN cutting very thin sections with the microtome difficulty is often experienced with forces due to static electricity generated at the knife edge. Paraffin is such a poor conductor of electricity that the problem is one of leakage to the air from the general surface rather than of grounding. When the air is damp enough the leakage is rapid and no trouble results. For more than a year it has been the practice in this laboratory to produce "artificial weather" by boiling water in the room in which sectioning is being done. With sufficiently high humidity created in this manner, it is possible to cut ribbons as thin as 2μ in any weather.

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