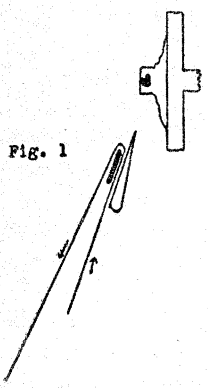
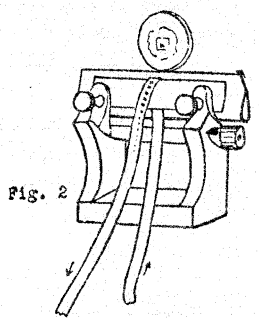
A SIMPLE METHOD OF DEALING WITH ELECTRIFIED MICROSECTIONS

ELECTRIFICATION of the sections is a frequent cause of trouble in microtomy. The sections when cut fly back into the paraffin block when the block rises for the next cut, or, if a short ribbon has already been cut, this flies to the knife, twists and curls, or "bunches up" on the knife in such a way that it is an exceedingly wearisome task to seriate the sections, and requires almost infinite care and patience. The causes of electrification may be various. It is owing either to atmospheric conditions or to faulty methods of infiltrating or blocking. The use of a metal drum on which the sections may be wound as cut, reduces somewhat, as is well known, the difficulty experienced because of the electrification of the sections. The suggestion of Guyer (p. 47 of his revised ed. of *Animal Micrology* 1917) to postpone cutting till a more favorable time is not very satisfactory to one who is compelled, because of press of time, to cut continuously. The following simple device I have used with electrified sections and have found very satisfactory. The labor of mounting such sections, by its use, has been very much reduced, and I believe it will be quite generally serviceable.





Figures 1 and 2 show the whole device, which is adapted to any of the common types of rotary microtomes for the cutting of serial sections. It consists of a thin blade of celluloid (one of the 6-inch rulers furnished by the biological supply-houses does very well). This is screwed flat against the section-knife by means of the usual knife-holding screws of the carriage. (Fig. 2). A long narrow strip of thin, tough paper is passed up between the celluloid blade and the microtome knife, until about 3 cm. of it protrudes above. After the paraffin block has been properly trimmed and adjusted to the knife, the sections are cut, and as each one is cut, it is attracted and held by the paper-strip which is pulled along with the fingers so as to produce a series. (Fig. 2). When the strip is nearly filled with sections, it is taken and fastened to the table or board with thumb-tacks, to keep it from curling, and another strip substituted.

By means of this extremely simple device, the writer has found it possible to cut with excellent seriation material which otherwise, owing to electrification, would have been impossible.

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(*Continued*)

DIVISION OF INDUSTRIAL AND ENGINEERING CHEMISTRY

H. D. BATCHELOR, *Chairman*
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SYMPOSIUM ON FILTRATION

D. R. SPERRY, *Chairman*

Filter cloth and its relation to filtration: ALVIN ALLEN CAMPBELL. Filter cloth is a very important consideration. Principal kinds are made of cotton, wool, jute, hemp, nickel and monel metal. Cotton duck the most used, but being replaced by materials of longer life though not necessarily better filterers. Solids really are the filter medium, the cloth is merely the retaining wall. The combination of strength, fineness and rapidity is what is wanted. Life of cloths depends on chemical action tending to destroy its use. Considers monel metal the best cloth material in most cases. Gives interesting list of various acids and salts and whether or not monel metal is recommended. Warns against electrolytic action on monel cloths, citing potassium permanganate as a case in point. Gives opinion