A SECTIONING CHAMBER.

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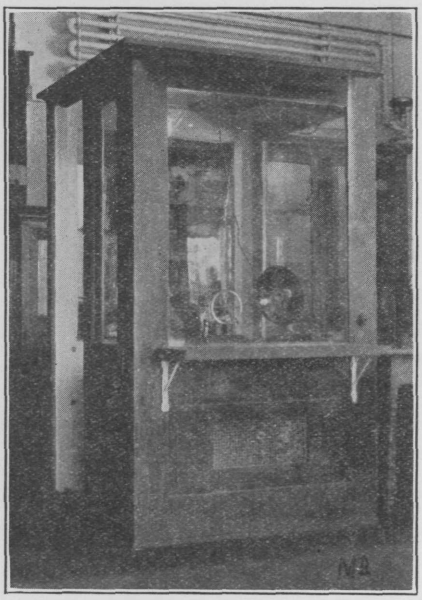
All who have had to do with paraffin sectioning in a small and crowded laboratory know the disadvantages. When the microtome is in use windows may not be opened, no one may walk rapidly across the floor in the vicinity, at times even loud speaking may be disastrous.



A Sectioning Chamber.

We have a laboratory, 20 feet by 22, in which we try to take care of the class in histology and embryology. Thus far the highest number of students registered has been twenty. By putting in a third laboratory period during the week and alternating some students on the two regular days it is possible to furnish each student a place to work.

The common paraffin bath and the microtome are in this room. The difficulties connected with the use of paraffin

in a single bath by so many students are great and are endurable only as long as consideration is shown by the users for each other.

The microtome difficulty has been to a great degree eliminated by the use of a chamber three feet ten inches square and six feet nine inches in height, constructed with glass on all sides as shown in the cut. One side has double sliding doors, twenty-one inches wide, which overlap each other when closed and which may be so pushed as to make an entrance either front or back. There is a heavy shelf running around two sides of the compartment at the level of the glass. On this shelf is clamped the microtome and it gives room for the box for the paraffin ribbon and for the heater mentioned below. Beneath the microtome shelf is a large ventilator, 18 inches by 8 inches, and in the roof there is another, 12 inches square.

When the doors are closed a radiant heater (600 watts, because no lesser heat could be obtained) placed on the shelf and pointed toward the microtome will very quickly raise the temperature of the chamber to the point where paraffin will section if the outside room temperature is at all endurable. Usually the heater is cut off before actual sectioning takes place and its connection is replaced by that to an electric lamp on the roof of the chamber.

Thus far no student knows by experience anything about that frictional electricity which sometimes cleaves a paraffin ribbon into its component sections and causes them to flit in all directions.

Due to the amount of glass used in the construction of the compartment, the laboratory room is not at all darkened by it.

It is also a protection against dust.

I wish I might boast that I had thought out this laboratory improvement, but it must be confessed that the chamber was made for an entirely different purpose for another department and then discarded. It took ten years of seeing it in a lumber room to envisage its function.

The convenience of being able to use the microtome at almost any time, either in the cold of winter with a stiff outside breeze, or in the warmer weather with the laboratory windows wide open, makes this a very valuable laboratory adjunct, worth all it costs either in space or appropriation.