cinellid beetles which was unique in my experience. The summit of Pisgah—altitude 5,750 feet— is covered by a dense growth of laurel which was still in bloom. There is also a variety of other shrubbery and herbaceous vegetation, and no evident connection between the beetles and any special type of plant was noted. The day was comfortably warm—about 80°; the sky was about three fourths overcast by stratocumulus clouds and there was a gentle breeze. The hour was about noon.

At several points on the very summit the beetles occurred in masses on the ground and covering the stems of the bushes. They clung to each other in such a way as to completely cover the surface they were on and several layers in depth. For the most part they were quiescent but moved about actively when disturbed. They did not readily take flight. I have identified the species as *Hippodamia convergens*.

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SCIENTIFIC APPARATUS AND LABORATORY METHODS

A LOW TEMPERATURE SEMI-MICRO STILL

WHILE condensing some acetylated sugars, it was decided that the removal of one of the reagents (dihydroxyacetone monoacetate) could best be accomplished by distillation.

The thermo-fragility and high boiling point of this monoacetate (96° at 1 mm), as well as the small amount of the condensation product produced, demanded of the still certain characteristics which were embodied in the design shown in the figure.

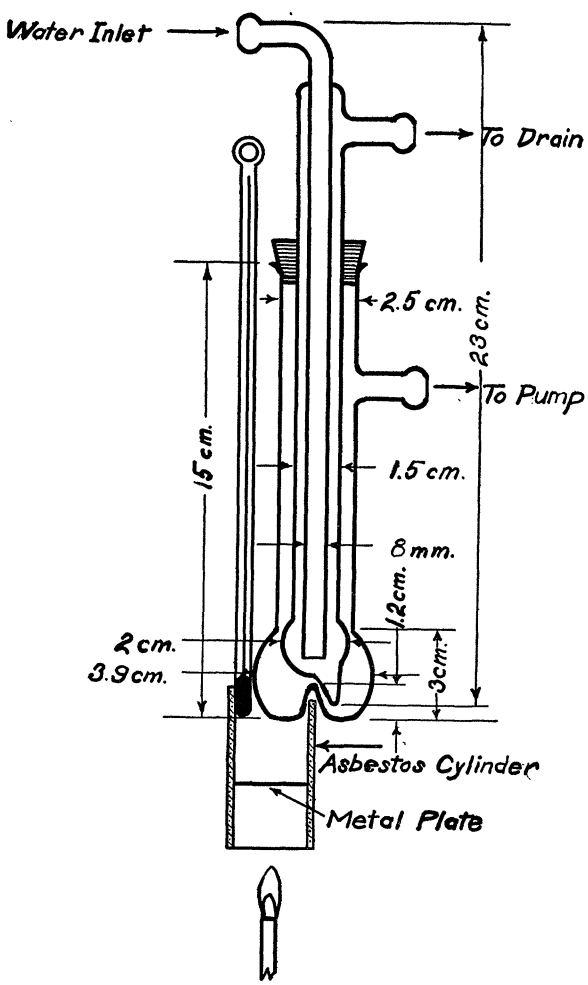

FIG. 1

The still consists essentially of a two-lobed glass flask. One lobe is for the material which is to be distilled, and the other is for the distillate. The vapors condense on the internal condenser, and the condensate drips off the teat into the receiving lobe.

When the still was used, the lobes were thermally separated by a thin strip of asbestos paper which encircled the distilling lobe and a thermometer bulb. A small metal plate was fastened in the center of this asbestos cylinder. An air-bath was constructed in this way, and the metal plate was heated by a micro burner. The receiving lobe was cooled by a wrapping of cloth wick which was kept moist by placing one end into a beaker of water. Cold water was run through the condenser. The distilling lobe was filled by the use of a pipette, and at the end of the distillation, the residue, which was a viscous liquid, was dissolved in water and removed by the use of a pipette.

An oil pump which produced a pressure of less than 1 mm was employed for distilling the monoacetate, and found to work well with a temperature difference of about 25° between the lobes.

If more involatile substances are encountered, the distillation may be facilitated by the use of a mercury or butyl phthalate pump backed by the oil pump, and a greater temperature difference attained by surrounding the receiving lobe with a freezing mixture held in a tin vessel bent to the proper shape. The condenser can be cooled better by circulating cold brine through it, or by vacuum-evaporating ether in it.

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NEW TYPE RAZOR HOLDER FOR ROTARY MICROTOME

THE razor holder here described was designed for use on the Spencer rotary microtome. The ordinary heavy microtome knife has been objectionable because