In the preparation of soil maps to be used as copy by the engraver, the Drafting Section of the Bureau of Soils encounters various difficulties often unknown to the men who make the surveys in the field.

In this paper we will endeavor to give a brief history of a soil map from the time it is received in the Drafting Section until it reaches the engraver for reproduction, together with some suggestions which may be helpful to all concerned.

In recent years, the methods used in making the Base maps in the field have varied considerably, but we will consider as a typical example, a plane table survey on the scale of one inch equals one mile.

The first step in the Drafting Section upon receipt of the plane table sheets, is to trace each sheet on vegetable tracing paper, showing roads in pencil, drainage in blue ink and closure errors, triangulation points, references in regard to joining of sheets and other notes in red ink. Magnetic north is also indicated. These tracings are used by the cartographer to adjust the traverse to the polyconic projection which has been constructed on white mounted drawing paper. The plotting of geodetic positions, secured from the records of the U. S. Geological Survey, U. S. Coast and Geodetic Survey, U. S. Lake Survey and other Government surveying Bureaus, and the development of land lines from the Land Office notes and plats is done in pencil.

After the adjustment is completed the map is passed on to the draftsman for inking. Roads, railroads, cities, etc. are inked in, after which houses, schools, churches, section numbers, etc. are properly indicated. The map is now ready for lettering.

Previous to this, a complete list of all names shown on the field sheets has been typewritten and checked for correct spelling. The decisions of the U. S. Geographic Board, Official Postal Guide, Official Railroad Guide, Bullinger's Shippers Guide and other reliable mapping agencies such as the U. S. Geological Survey and Rand McNally are used for this purpose.