

AN OUTLINE
OF
BLOWPIPE PRACTICE,
AS APPLIED TO THE
QUALITATIVE EXAMINATION OF MINERAL BODIES.

§ 1.

THE BLOWPIPE—ITS STRUCTURE AND GENERAL USE.

The blowpipe, in its simplest form, is merely a narrow tube of brass or other metal, bent round at one extremity, and terminating, at that end, in a point with a very fine orifice, Fig. 1. If we place the pointed end of this instrument just within the flame of a lamp,

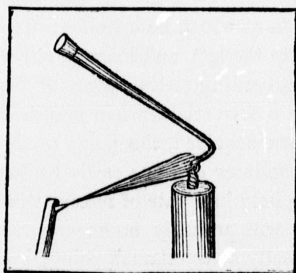


FIG. 1.

common candle, or gas-jet with narrow aperture, and then blow gently down the tube, the flame will be deflected to one side in the form of a long narrow cone, and its heating power will be greatly increased. Many minerals, when held in the form of a thin splinter at the point of a flame thus acted upon, may be melted with the greatest ease; and some are either wholly or partially volatilized. Other minerals, on the contrary, remain unaltered. Two or more substances, therefore, of similar appearance, may often be separated and distinguished in a moment, by the aid of the blowpipe.

The blowpipe (in its scientific use) has, strictly, a three-fold application. It may be employed, as just pointed out, to distinguish minerals from one another: some of these being fusible, whilst others are infusible; some attracting the magnet after exposure to the blow-