necessary, further extension should be made until full length rods are reached. (*b*) Cut away the enamel until the surface of the filling can be so formed that the enamel margin will be self-cleansing, or be protected by the gum margin. (*c*) Do not form an enamel margin in such a position as to leave a small portion of enamel between it and one of the developmental grooves. (*d*) A fissure, sulcate or angular developmental groove should be cut in its entire length and included in the cavity. (*e*) The line of enamel margin should be in definite curves or straight lines, avoiding all angles. (*f*) The labial, buccal and lingual margins should be parallel and at right angles to the seat of the cavity.

4. Obtain retention for the filling. (*a*) All retention should be cut in the dentine and in the direction of the greatest amount of tooth tissue, avoiding the pulp. (*b*) Retentive form should be as near as possible to the point of stress. (*c*) Grooves or undercuts, when used, should be in opposite walls or angles. (*d*) The seat and step must be flat and at right angles to the long axis of the tooth and the direction of the stress. (*e*) The surface of the seat and step together must be at least equal in area to the surface of the filling exposed to the stress.

NOTE.—(1) The gingival wall of a cavity forms the seat. (2) The step is the cavity cut into the morsal surface to further resist the stress of mastication.

5. Bevel and polish the enamel margins. (*a*) The peripheral enamel margin should be bevelled from 5 to 30 degrees, while the dentinal enamel margin should be rounded. (*b*) All short or loose rods should be removed. (*c*) Polish the enamel margin where possible.

TECHNIQUE OF CAVITY PREPARATION.

Class I. (*a*):—

1. All overhanging enamel may be broken down with sharp chisels. The chisel may be held between the thumb and the first two fingers, using the third finger as a support on an adjoining tooth to keep the instrument from slipping. In cutting the enamel on the lingual surfaces of the incisors, the thumb may be used as a support grasping the instrument in the fingers. Where the enamel is heavy or a proper support for the fingers cannot be had, the chisel blade is placed against the enamel and given a quick, decisive blow with a slue mallet. A chisel in automatic is sometimes used. In no case should the instrument be struck with the hammer unless the operator is quite certain that the enamel will cleave, otherwise a severe shock may be given the patient. To cleave enamel best the force should be in the direction of the rods.

2. Softened decay may be best removed by using sharp spoon excavators, working the blade down close to the wall of the cavity,