

**Emboss'ing**, *n.* [Fr. *embosser*, from *bosse*, a stud.] (*Arts.*)

The art of obtaining patterns of any kind, or inscriptions, in relief, on cloth, leather, felt, metal, pasteboard, or paper. It is effected by subjecting the material on which it is desired to raise any pattern to very great pressure, which may be applied vertically by the sharp blow of a die, or by a cylinder. For embossing crests, or names, on paper and envelopes, a small stamping-machine is used, and the device desired is cut in intaglio on the die. The paper is placed on a piece of soft metal stamped by the die, and therefore having the device in relief, and the impression is obtained by pressing the die forcibly on it by means of a lever. For embossing woollen goods, the cylinders which are used must have the pattern cut on them in intaglio; but for velvets, and embossing paper of any size, the patterns must be in relief. The following is the process adopted when cylinders are used. The engraved cylinder, or embossing-roller, and another of the same diameter, called the bed-roller, are set closely together, and the material is passed between them. The bed-roller is made of paper (see CALENDERING), and covered with felt, to prevent it from receiving and retaining any impression from the embossing-roller. The cylinder on which the pattern is cut is made hollow, to receive heated irons, or to be heated by steam. Leather may be embossed by pressure, or by rendering it supple by moisture, and then fashioning it into the desired shape on a mould cut for the purpose. Ornaments for picture-frames and the interior decoration of apartments, which closely resemble carved oak, may be made in this manner. The cloth which is used for binding books is embossed by passing the material between two steel rollers engraved with the required pattern, which are heated by gas jets from pipes passing through the centre of the rollers, which are hollow. When there is any peculiar device on the cover of a book bound in cloth, and there is much gilding about it, the cloth is first glued to the millboard covers, and subjected to great pressure from the die engraved for the purpose, after it has been laid on an iron plate, which is heated from beneath by gas.