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ORNAMENTAL PAINTING AND GILDING ON
EARTHENWARE AND PORCELAIN.

This elegant ornamental art was introduced into Canada for the first time by Messrs. Hurd & Leigh, of Yonge street, Toronto, about two years ago.

The exceedingly beautiful wares of the English potteries are so attractive to all who have the least taste, that almost every family regards the possession of a set of beautiful china as among the first requisites of housekeeping. Unfortunately, however, the loss by breakage in transporting this class of goods from England to this country is so great as to raise the price of the finest articles above the convenience of many to purchase. This will be better understood when we bear in mind that one broken article spoils the sale of a whole set, and in many cases two or three sets are required to complete one, on the *whole* of which the duty has been paid. The Messrs. Hurd & Leigh, familiar with the pottery business in all its practical detail, resolved to remedy this state of things by importing their fine porcelain without the ornamental work, and having the artistic embellishment executed here, at their own establishment. They accordingly sent to England for a family of artists who had been educated at a school of design in connection with the potteries, and had long experience in working for some of the best establishments. These came, a furnace was erected, and the business is flourishing under the patronage of both sections of the Province. Besides working for the trade, this firm takes orders from private individuals, such as completing sets, painting and gilding mottoes, crests, and designs of any required pattern. The process of embellishment will be all the better understood if preceded by a brief account of the material wrought upon.

The chief ingredients of pottery are alumina and siliceous matter, in familiar terms clay and flint, mixed together in various proportions, according to the kind of ware to be produced. The possession of the clay requisite for making the finest porcelain by the Chinese, long gave their manufactures a most envied superiority over those of other countries. The Portuguese had imported porcelain from China since 1503, and as yet, in 1709, all the labour and research, and all

the wealth that had been spent in experiments, had failed to produce an imitation of it in Europe. A little before that, a horse's feet sank into a *white soft earth* in Germany, near Schneeberg, when its rider, an iron merchant, travelling on business, was led to examine it, and afterward he determined to sell it for *hair powder*, which was then in fashion. Some of this hair powder fell into the hands of Böttcher, who had long been searching for it, and in 1709 he succeeded in making from it the true translucent porcelain. The exportation of the clay was prohibited, and all in the possession of the secret of making the porcelain were sworn to perpetual secrecy, and the penalty of imprisonment for life was attached to its violation.

France had produced an artificial porcelain ever since 1695. In 1755 the much desired material was found in St. Austle and St. Stephen's, Cornwall, and in 1758 fine porcelain was made in England. In connection with this, the name of Josiah Wedgwood will go down to posterity along with those of Luca della Robbia and Bernard Palissy. In France, good porcelain material was found a few years later. The name by which it is customary to particularize fine potter's clay is *kaolin*, the Chinese name, which means a "high ridge," because they obtain it from a high ridge of *granite* rocks, of which the clay is a decomposition.

In Cornwall, it passes through several processes of preparatory treatment, by which all improper substances are removed before sending it away from the "pits" to the potteries. At the pottery it is subjected to the action of appropriate machinery, by which it is cut into small pieces, diffused through water, and forced through a succession of sieves till not a particle remains which the potter wishes to exclude. Its proper consistency is determined by weight, one pint weighing 24 ounces. The flint is heated to redness in a kiln, and at this heat thrown into water, which facilitates the next process of grinding it to fine powder. This is worked in water by machinery until a pint weighs 32 ounces, when it is fit to mix with the kaolin solution in the proportion of five of kaolin to one of flint. To this mixture are added, according to the nature of the ware to be produced, broken porcelain ground, powdered bone ash and plaster of Paris. The mixture is now called "slip," and the next thing to be done is evaporation to the consistency of dough in the "slip kiln." Then, in order to increase its toughness and plasticity, and to effect the expulsion of air it undergoes a variety of manipulations, as *beating*, *slapping*, and thorough kneading. Fine porcelain paste is often kept a year or more in a moist state before it is used. It is now formed into the arti-