

# SPENCERIAN STEEL PENS

Are The Best

ESTABLISHED 1860.  
PEN WORKS—BIRMINGHAM, ENGLAND.

These Pens have a national reputation for uniform excellence, comprising the essential qualities of ELASTICITY, DURABILITY and EVENNESS OF POINT. They are unsurpassed for correspondence and business purposes. A sample card of the Special numbers, 4 PENS, will be sent for trial on application to

BUNTIN, BOYD & CO., MONTREAL.

BUNTIN, REID & CO., or BROWN BROS., TORONTO.

they sell chiefly on the cheap stands in the streets," he said. "You see it is easily chipped up; and the interior presents a dirty white that does not resemble natural ivory in the least. Now take a piece of artificial ivory made after the improved method, and see the difference. The plates here are of a pure white, and tough and more easily worked into proper forms than the natural ivory itself." "But how is this manufactured?" was asked, "Why, out of the cheapest and simplest material. We collect a large number of bones of sheep and waste pieces of deer and kid skin, then we macerate and bleach the bones for two weeks in chloride of lime, after which they are heated by steam, along with the skin until they form a fluid mass, to which is added a small quantity of alum. This fluid is then filtered and thoroughly dried in the air, and allowed to harden in a bath of alum. When finally taken out of this bath, we have perfectly white plates, ready to be worked up and polished into any conceivable shape."

**CARDBOARD ENAMEL.**—Take one pound of parchment cuttings, one-quarter pound of isinglass, and one-quarter pound of gum arabic, in four gallons of water, boil in an iron kettle until the solution is reduced to twelve quarts; it is then removed from the fire and strained. The solution is divided into three parts of four quarts each; to the first portion are added six pounds of white lead, ground fine in water; to the second portion are added eight pounds white lead, and to the third are added six pounds of white lead. The sheets of paper or cardboard are stretched upon flat boards and brushed over with a thin coat of the first mixture, with an ordinary painter's brush; the paper is then hung up to dry for twenty-four hours. After this the paper is ready to receive a coat of the second mixture, and is again hung up to dry for twenty-four hours; the paper is again treated in the same way with the third mixture, and dried for twenty-four hours. After this it receives a high gloss which is obtained by laying the work face downward on a highly polished steel plate and then passing both with great pressure between a pair of powerful rollers.

**TEST OF GUM-ARABIC.**—A mixture of ferric chloride and potassium ferricyanide in solution is a certain and delicate reagent for artificial gum made from dextrine. The reagent is prepared by mixing 15 drops of the pharmaceutical solution of ferric oxide, with 15 drops of the cold and saturated solution of potassic ferricyanide, and 5 drops of dilute hydrochloric acid (spec. gravity 1.165) with 60 c. c. of water. If 6 c. c. of a 20 per cent. solution of the sample of gum be treated with a 3 c. c. of this reagent pure gum yields a clear yellow viscous liquid, which remains unaltered from eight to ten hours. If, however, dextrine be present, the yellow color changes either at once or in the course of an hour, and in two or three hours the mixture has become blue.—

## Our New Publications.

LATEST EDITION OF

### De Fivas' French Grammar

NOW READY.

THE ONTARIO

### HIGH SCHOOL READER.

READY 1st AUGUST.

THE

### MARRIAGE RING SERMONS

By Rev. T. DE WITT TALMAGE.

Price, Cloth extra, 50c. Paper Covers, 25c.

### SELECT SERMONS.

By REV. SAM JONES.

Price, Cloth extra, 50c. Paper Covers, 25c.

### ANNETTE;

The Metis Spy of the late N.-W. Rebellion.

By EDMUND COLLINS.

Price, Cloth extra, 50c. Paper Covers, 30c.

## ROSE PUBLISHING CO.,