## Science Siftings

## By 'Volt '

## Insanity in Canada.

The insane in the asylums of Canada number 16,662 , an increase of 25 per cent. Since 1801. One authority attributes the increase to immigration and lax medical inspection at ports, 3000 of the 699,500 immigrants of the last ten years having been at least parially insane

## Using up Sawdust.

An interesting new material for using up sawdust is wood-stone. It is a mixture of sawdust and calcined magnesia reduced to powder, the moistened ingredients being thoroughly mingled, pounded, ground, and submitted to moderate pressure for a number of hours. The finished products are further compressed in a bydrauhe press. The material is incombustible, impermeable to water, and takes a high polish, being adapted for pavements, limngs, coverings, and ornamenial purposes.

## A Cosmopolitan City.

The most cosmopolitan city in the United States scems to be Chicago. Here is the census of its speakers of languages otber than English :-German, 500,000; Polish, 125,000 ; Siwedish, 100,000 , Bohemian, 90,000 ; Norwegian, $50,000^{\prime}$; Yiddish, 50,000 , Dutch, 30,000 ; It' alian, 25,000 ; Danish, 20,000 ; French, 15,000 ; Croatian and Servian, 10,000 ; Slovakian, 10,000 ; Lithuantan, 10,000, Hungarian, 5000 ; Greek, 4000 ; Frisian, Roumanian, Slavoman, and Fiemish, $\{000$ to 2000 ; Chinese and Spansh, 1000 ; Finnısh, Scotch Gaelic and Irish Gaelic, 500 ; Russian, 7000 ; Arabic, 250 ; Armenian, Manx, Icelandic, Ilbanian, 100 ; less than 100 , Basque, Breton, Esthonan, (ispsy, Japanese, Portuguese, Turkish.

## Spectacles.

It is hard to realise what our ancestors did without the help of spectacles. The first mention of them seems to be toward the end of the thirteenth century, when convex spectacles were mvented, it is supposed, by Roger Bacon ('oncave glasses were introduced soon afterward, but the Spectacle Aahers' Company of London was not neorporated untal 16.30 . It seems that the ancionts hnew nothmg of these ands of vision, and it is more than likelv that Homer and even Malton maght have been spared their blandness had they understood the use of a powerful lens. Eyeglasses came in mtich later, when the spectacles were constdered too cumbersome for fashonable wear, and lorgnettes came cien later when the great ladies, wished an ornamental case for ther eyeglasses. The eycglasses of 10 -day fit on the nose with a spring; formerly they were held in place with the hand.

I'ath of Ocean (cables.
There beems to be no logical reason why cables cannot be lad actoss any section of the oceans of the world, no matter how gieat the depth. Some portions of the klantae cables are three males below the surface, and thas is not necessaraly the extreme depth, for the cable may and probably does pass from the top of one submarme lifl to another without dooping matent ally into the deep vallers between (hays 'Lippincott's Magazane') The greatest known depth of the sea is 40,038 icet, of 7 3-5 mules, found in the South Atlantue midway between the shand of Tristan d'deuhnd and the mouth of the Rio de la Plata Soundings have been made to the depth of 27,180 feet in the north Atlantic south of Newfoundland, and about 31,0 fof feet, or nearly $4 \frac{1}{2}$ inlies, is reponted south of the Bemmalas. Even such ememous depth as these need not hader cablelaymer so far as the theory is concerned, but in pracfice, for reasons of economy an mantenance and otherwise, it is found best to take advantage of favorng conditions in the ocean's bed To illustiate, all of the cables betueen the l'meded States and Jutope run up along our coast until they reach the nevghoothood of Newfoundand brione starfmg actoss to therr destimattion in Ifeland or France The reason for this is found in the range of submarine tablelands, wholi hes between the tirce last-named countries.

## HOW TO PAINT A HOUSE CIIEAP.

Parrara Paint In White and Colors, Mixed Ready for retaion its Gloss and Lnetre for at 1 ast five years, and will look better in eithtyears than leat a:d oil paints do in two. pew USE CARRARA the firgt cost of which is no greater than lead and oil painte, and your paint bills will be reduced by over 50 per cent. A beautifnlly-illustrated booklet, entilled 'How to Paint a House Cheap,' will be forwarded free on application,
K. HAMSAK 1 ND CO., 19 Vogel Strect, Dunedin.

## The Home

## By • Maureen'

## Baked Lemon Pudding.

Beat 3 eggs, add to them $\frac{1}{4} 1 \mathrm{~b}$ of sifted sugar, 60 z of butter melted, then grated rind and juice of 1 lemon. Beat together, line a dish with puff paste, stir up the mixture, and put it into 1t. Bake at once in a hot oven.

## Bahug Potatoes on Range.

Place an asbestos mat on the range, and on it lay the potatoes, previously washed clean and dried; cover with a deep tin or pan. In one hour the potatoes will be bursting with mealiness.

Two Effective ways of Cleaning Silver.
Put some borax into boiling water, and when dissolved soak the silver in it for a few minutes, then dry with a towel and polish with a chamois leather. Another method is to soak the silver in sour milk, wash in hot water, dry, and polish with chamois leather.

## Lemonette.

Three pounds of loaf sugar put to a quart of water; boil gently for about 10 minutes; pour into a basin, and stand till cold; then add 2oz of citric acid and 10 drops of essence of lemon; stir well, and pour in10 botiles. A little lemon peel boiled with the sugar and water improves it.

## Castle Puddings.

Take 3 eggs, the weight of 2 in butter, sifted loaf sugar, and fine flour. Beat the butter to a cream, add the eggs well beaten, next the sugar, and the flour last, beating all the time. Butter small cups, fill three parts full, bake half an hour in a moderate oven. Turn out; serve with lemon or brandy sauce. Less sugar can be used if not liked so sweet. Half a teaspoonful of baking powder should be maxed in the flour.

## Christmas Mince Meat.

Ingredients-1tb suct, $1 \frac{1}{2} \mathrm{lb}$ raisins, $\frac{3}{4} \mathrm{lb}$ currants, 1 tb apples, 1 ib sugar, $20 z$ candicd peel, $1 \frac{1}{2}$ lemons, 102 almonds, $\frac{1}{2} 0$ allspice, 2 glasses brandy, and a few cloves. Hethot-('hop suet finely, stone rasins and clean curtants, blanch almonds, peel and chop apples small, cut candied peel coarsely, mix well all dry ingredients and add lenion juce and brandy last. Tie down closely in jars. When required line patty pans with good pastry, put in the mince meat and cover with pastry. Strew with sugar when sending to table.

## Gooseberry Fool.

Ingredient -1 quart gooseberres (green), $\frac{1}{2}$ lt moist surar, 1 stip lemon peel, $\frac{1}{2}$ pint cream, $\frac{1}{2}$ pint milk. Me-thool-Top and tanl the gooseberries, wash them, place in an enamedted stewpan over the fie with a few spoonfuls of water, the sugar and lemon peel; stew gently till teider, rub through a sleve to remove the skins, When quite cold stor in the mulk and cream; the later should be stifly whoped. The yolks of 2 eggs may be substituted for the cream, but will not be so mice Scrve the fool in a large elass dish, or in small custard glasses.

## A Cement for Attaching Metal to Class

Tahe $20<$ of a theck solution of glue, and mix it w'ith los of hasced onl varnish and half an ounce of pure turpentine; the whole are then bolled together in a cluse vessel The two bodies should be clamped and held together for about two days after they are united, to allow the cement to become dry. The clamps may then be removed.
pranvern

## CRECG SHORTHAND - A NEW ZEALAND RECORD.

$A^{T}$ an Examination held by the Gregg Shorthand Absoointion of $\mathrm{N} Z$ CHammond, 15 yearg of age. secured a certificate for
Minute 7his a New Zealand kecord for one so young.

Gregg Shorthand is used in more achools in America than any other Three ysterms combined, ind is recognmed hy the N,Z Government in all cammations Being bened on longhind. With few rules and No other systems, ind is especially adnpted ior INSTRUCTION by POST in olessons. Writefor particulars.
J. W. IRWIN, N.Z. Representative,

229 Eilmore Street, Christchurch,

