and variety planer shown by the same firm also indicate good or 15 pounds of granulated sugar for a dollar, whereas under design and work. Another collection of exhibits worthy of the revenue tariff they got s pounds for a dollar. mention in this class is that shown by Messrs. Cowan & Co., of Galt Ontario, embracing a gig-caw, a double-cope tenoning machine, a pony surface-planer, and a mortising machine. The injured them. tenoning machine takes, in some important feature, after the American pattern, and the American style is more or less traceable in other machines shown by this firm. The William Hamilton Manufacturing Company, of Peterboro' Ontario, show three pieces, one of Covel's patent automatic sawsharpening machines for circulars and mill-webs, by which results are obtainable which would be impossible with a hand-worked machine. A useful saw-bench for dressing and the latter quotation is for a grade of sugar much below our 7 h amering mill saws is also shown. Mention must further be made of the massive 100-horse-power Corlis engine, shown by Messrs, Inglis & Hunter, of Toronto, as well as a 35-horse-power Westinghouse engine. The exhibit of the Ontario Pump Company of Toronto, to be found in the South Promenade, may also be mentioned under this head. It com- extent in defiance of the very bottom principles of protection. prises a selection of Halladay's windmills and pumps, intended to supply water for drainage and irrigation purposes to villages, farms, etc. The design of these windmills includes many ingenions contrivances for the regulation of the speed of the mill and for other purposes, thus combining many of the advantages of steam-power with great economy in operation. Among other exhibits which hardly come under any other than the general head of machinery, is the propeller wheel shown by Messrs. William Kennedy & Sons, of Owen Sound. The wheel is a new invention in so far as its moveable blades are concerned. Propellers are, in general, of one piece, but in this exhibit the blades or arms can be adjusted, and even taken off, without destroying or injuring the rest of the wheel. Another interesting machine is that shown by Messrs. J. R. Woodburn & Co., of St. John, New Brunswick. It is a pulveriser of sugar and other friable substances, reducing them to an impalpable powder. This class of machine is used extensively in Canada, and is found to work satisfactorily.

Mr. Massey (of the Massey Manufacturing Company Toronto), has been fortunate enough to find in the Marquis of Lorne a purchaser of one of his self-binders, which is to be shipped to Scotland Mr. Massey has also taken an order for a number of self-binders and harvesters to be shipped to South America.

THE SUGAR QUESTION.

(Hamilton Spectator.)

THE sugar question is one not difficult to deal with,

In 1878 Canada imported 105,223,279 pounds of sugar. The duties paid aggregated \$2,515,655.84, or \$2.39 on each 100 pounds of sugar imported.

In 1885 Canada imported 181,717,786 pounds of sugar, The duties paid aggregated \$2,355,770.62, or \$1.29 per 100

In 1885 the duty was lower than it was in 1878 by \$1.10

per 100 pounds.

In 1878 the cost of imported sugar with duty added was \$8.07 per 100 pounds. The average price of granulated sugar credit for having gone as far as public opinion would allow them was \$12.50 per 100 pounds. The importers and grocers did not refine their sugar; they simply passed it through their hands and took \$4.43 profit for each 100 pounds handled.

In 1885, the cost of imported sugar with duty added was \$3.89 per 100 pounds. The average price of granulated was \$7 per 100 pounds. The importers refined nearly all the sugar imported, lost a good deal of it in the shape of dirt, and had \$3.11 per 100 pounds of profit on the quantity sold. If the dirt be deducted they probably had about \$2 per 100 pounds for retining and handling, while under the revenue tariff the importers were able to pocket \$4.43 per 100 pounds for simply handling.

The thing which interests consumers is that now they get 141 with hydrogen.

In the face of these facts Reform journals are not ashamed to tell their readers that the change in the sugar duties has

THE SUGAR QUESTION FAIRLY STATED.

(Toronto World.)

The Globe imagines that it hits the National Policy hard by reiterating the assertion that because of protection Canadians have to pay 7 cents per pound for sugar of the same quality as is sold in England for 4 cents. The truth of the matter is that cent sugar, and we at once score out the figure 4 and put 5 in its place. This brings us to a comparison between 7 cents here and 5 cents there. Sugar is dearer in Canada because of protection, it is argued. We reply, No, but because our sugar duties have been imposed for revenue chiefly, and to a large

Tuening to the Trade and Navigation Returns for the fiscal year 1884-85, we find the quantities, values, and amount of duties paid on sugar, molasses, etc., as under:

Sugar of all kinds, lbs. Molasses, gallons	QUANTITY. 200,011,541 3,562,864	VALUE. \$5,100,478 727,657	DUTY \$2,544,920 111,376
Confectioneryandsugar candy, lbs	620,766	87,392	36,811

\$5,915,527 \$2,693,107

The proportion of refined sugar, in the form of confectionery and candy, is so small that it does not much affect the calculation. Our duties are high enough to exclude foreign refined sugars, let that he admitted. Now note these facts. of \$2,544,920, collected on \$5,100,478 worth of "sugar of all kinds," is jifty per cent on the value. The duty of \$2,693,107, collected on the total importation of \$5,915,527 worth, is fortyfive per cent on the value.

Were the principle of protection thoroughly carried into practice, there would not be one cent of revenue collected on sugar. For, while all refining grades, raw sugars, melado, cane juice, and molesses would come in free, the duties on refined sugar in all forms would be simply prohibitory. It is not carrying out the protectionist principle, but in utter defiance of it, to impose duties of 45 or 50 per cent. on an article that we do not and cannot produce at home. To be consistent protectionists, we should do with sugar as we do with tea and

coffee -admit it free.

All forms of sugar unrefined should be free, while the duties on refined sugar in all forms should be high enough to shut out the foreign article altogether. This would be genuine protec-tion—the real Simon Pure. But the truth is that our alleged N. P. Dominion Government has been weak-kneed from the start on some main points, and has been too timorous to carry out to their logical consequences the principles it professed. But we must make allowances. It has to be stated that the old free trade delusion - the idea of "a tariff for revenue only," -still has a certain hold on the public mind; and we may have to go. The people need further education on this subject.

No wonder that, with a duty of 45 or 50 per cent, imposed on an article which in its raw state should be entirely free. sugar is somewhat dearer in Canada than it ought to be. Whenever we gain courage enough to take our stand on true protectionist ground, and to knock off that blundering impost of from two and a half millions to three millions of dollars annually collected on sugar, then the article will be as cheap in

Canada as in England.

FROM experiments it appears that a gas engine indicating ten horse power with coal gas would barely indicate a four horse power