

says that in the extensive plains of Gaul they used "large hollow machines, with teeth fixed in the forepart." These were "pushed forward on two wheels through the standing corn by an ox yoked to the hind part," the ears being cut off by the teeth and falling into the hollow part of the machine. A more particular description of this implement is given by Palladius, and is worth quoting in full: "On the plains of Gaul," he writes, "they use this quick way of reaping, and without reapers cut large fields with an ox in one day. For this purpose a machine is made, carried upon two wheels; the square surface has boards erected at the sides, which, casting outwards, make a wider space above. The board on the forepart is lower than the others; upon it are a great many small teeth, wide set in a row, answering to the height of the ears of the corn, and turned upwards at the ends. On the back part of this machine two short shafts are fixed, like the poles of a litter; to these an ox is yoked, with his head to the machine, and the yoke and traces likewise turned the contrary way, well trained, and who does not go faster than he is driven. When this machine is pushed through the standing corn all the ears comprehended by the teeth are heaped up in the hollow part of it, being cut off from the straw, which is left behind, the driver setting it higher or lower as he finds necessary; and thus, by a few goings and returnings, the whole field is reaped. This machine does very well in plain and smooth fields, and in places where there is no necessity for feeding the straw." There is, we think, no doubt that in this implement we have the original of the modern reaping machine; and it is a curious fact that in California at the present day the reapers used gather the heads of the wheat and barley only. A similar machine was used in Illinois twenty years ago, but in that State the self-binder is found to give better satisfaction.

It is not necessary to inquire how the Roman reaper went out of use; no doubt it was one of the results of the numerous invasions of Gaul and Italy by the northern tribes. But when we consider what the reaping machine has done for agriculture and for the world within the past sixty years—the revolution it has worked in the cost and labour of harvesting crops everywhere, and the large effects of this economy on the civilization of the world—we cannot but wonder what the present condition of agriculture, and of all the industries dependent on it, might be had the old Roman reaper survived through the centuries that have passed away since the Frank crossed the Rhine. What might not that implement be to-day with the inevitable improvements made upon it in a long course of intelligent use? What might not have been the influence upon discovery and invention in respect to all labour-saving implements; and what might not the effect be on every industry and every art?

Good pastures are the good farmer's main dependence, and he should bend every energy to make them luxuriant, rich and nutritious. They should be cared for, manured and limed as well as are the grain fields.

### OLEOMARGARINE.

What to do with oleomargarine is one of the vexed questions on the other side of the lakes. Laws of a more or less stringent nature have been passed in a number of the State Legislatures; but owing to adverse decisions of the Courts it has not been found possible to do more than require the makers of the stuff to brand it by its name. The Federal Congress is wrestling with the subject this session, but even there the question is not found easy of solution. The trouble seems to be, that they are trying to regulate the trade; and regulation seems to be regarded as the proper thing in view of the fact that the manufacture of oleomargarine has grown to large proportions under the sanction of the laws of the land—or, at all events, without their interference—and that so-called "vested rights" have been created which could not now be taken away without destroying a large amount of capital employed in the industry. Like the spirituous liquor question, there are large interests at stake, and these interests are found to be more active and pushing in the lobby than all the opposing interests combined. Armour & Co., of Chicago, and a few other gigantic firms like them, are using every influence and bringing every pressure to bear to defeat any proposed legislation; and we shall be agreeably surprised if their efforts do not meet with a large measure of success. It is a hard matter to fight a "vested interest" in the Legislature, as every attempt to regulate, restrict or prohibit the liquor traffic amply proves. But in our country, fortunately, no vested interest in the production of bogus butter has yet been created, and the Dominion Parliament is taking the only proper course in dealing with it. At the first it was proposed to put a tax of 10 cents per pound on all imported oleo butters, and of 8 cents per pound on all made in the country. It was thought that such a tax would prove to be prohibitory; but when the subject came up for discussion the House was easily persuaded that if prohibition was what was intended, the law should go for prohibition straight, in as far as the imported article was concerned. Speaking of the effect of the manufacture of oleomargarine upon the export of butter from the United States, Mr. Bain, of Wentworth, said:

"The export of butter from the port of New York in 1880 was \$6,600,000, and the export of oleomargarine in the same year was \$2,400,000. But last year, when the hog had got fairly into competition with the cow, a different tale was told. It was found that the export of butter had shrank to \$3,500,000, while the export of oleomargarine had risen to \$4,500,000."

Another member of the House, Mr. Platt, of Prince Edward County, said:

"This problem has baffled the people of the United States so far; but it is presented to Canadians now almost for the first time. If their industry is allowed to establish itself in Canada, or if the use of oleomargarine is allowed to grow, the problem will constantly become more and more difficult to deal with; but if we shut out the article completely, we will take a position