be found a complete bill of material for this creamery as shown below:

## MAIN BUILDING.

For sills-6 pieces 6x8 ft. long; 2 pieces 6x8 ft. long. Lower joist-32 pieces 2x8, 20 ft. long; upper joist-32 pieces 2x6, 20 ft. long. Rafters -42 pieces 2x6, 14 ft. long. Studding-109 pieces 2x4, 12 ft. long. Flooring-1,000 ft. Siding-1,900 ft. Casing and cornice-1,200 ft. Sheathing-4,100 ft. Ceiling-4,300 ft. Strips Paper-2,000 square ft. -1x2in., 900Shingles-10,000.

## ICE-HOUSE.

For sills—2 pieces 6x8, 30 ft. long; 2 pieces 6x8, 20 ft. long. Rafters—32 pieces 2x6, 14 ft. long. Studding-62 pieces 2x6, 12 ft. long. Sheathing and roof-boards-2,300 ft. Siding -1,700 ft. Cornice and casing-300 fc. Strips -1x2 inches, 300 feet. Shingles-9,000. Paper-1,400 square feet.

## BOILER-ROOM.

For sills-2 pieces 6 x 8, 18 ft. long; 2 pieces 6x 8, 16 ft. long. Studs-40 pieces 2 x 4, 12 ft. long. Rafters-14 pieces 2 x 4, 18 ft. long. Sheathing-1,000 ft. Ceiling joist 2 x 4, 16 ft. Siding-800 ft. Shingles-3,000. Twelve 10x16 twelve-light windows. One keg of 6 d nails, one of 8 d, one of 10 d, one of 20 d, and 75 lbs. 4 d nails. Labor equivalent to four men's work for twenty-five days.

The lumber bill includes material for window casings and doors. It will take about five and a half rolls of sheathing paper, costing about \$5.50. The Peshtigo Lumber Company estimates the cost of the lumber and shingles at \$512.25. Thus it will be seen that the total cost of the creamery, sccording to the plans and specifications here given, is as follows:

Cost of lumber, including shingl s	\$512	25
Windows glazed	27	72
Sheathing paper	5	50
Nails	14	25
Labor, 100 days at \$2.50 per day	250	00
Cost of machinery and outfit	1082	85
Total cost	\$1892	57

The following list of apparatus suitable for furnished us by the this size creamery has be house above mentioned:

nouse assis		
1 six-horse power Monarch engine, with one		
six-horse vertical boiler all complete, with		
Hancock inspirator	\$315	
3 300-gal. steam vats\$40 00	120	
2 250-gal. creamery churns 35 00	70	
1 Power butter worker	50	00
1 Covered crank suction and force pump	25	00
1 240-lb. Union family scale	6	00
1 Butter salting scale	5	00
2 Butter ladles		5
2 14-quart iron-clad milk pails 00	2	0
16 Feet 1 7-16 main shafting	8	8
6 " 1 7-16 counter "55	3	3
1 Pulley 24 x 5 x 1 7-16	6	7
1 " 16 x 5 x 1 7-16	4	4
2 " 12 x 8 x 1 7-16, flat face 4 60	9	2
2 " 12 x 5 x 1 7-16, round face3 50	7	0
1 " 6 x 6 x 1 7-16, flat	2	8
400 Common-sense cream-setting pails	300	0
12 30-gal. jacketed cream carrying cans	126	0
12 50-gar, jacketed cream carrying tans		_
	<b>\$10</b> 82	7

SIR,-I am a subscriber to the FARMER'S AD-VOCATE, and I like it well, and think that no farmer that consults his own interests and the good of his fellows can afford to be without a good agricultural paper like the ADVOCATE. Cavendish P. O., P.E I. C. MACN.

## Butter vs. Butterine.

BY J. GOULD.

It is a general assertion that the only way that butter frauds can be driven out of the market is by making the better grades of butter so abundant that there will be no demand for the frauds or counterfeits. This assertion is based upon a supposed fact, that consumers prefer bogus butter to the inferior dairy produce So long as the fight for supremacy was between butter and oleomargarine, there was some show in the argument, but now that butterine-a product of butter and deodorized lard is the disputant, the tables have changed, and there is far more evidence to go to show that butterine is pushing the fine butter aside, and usurping its place. Then who is responsible? Not wholly the dairymen, for 999 times out of the thousand the dairyman sells butter free from adulteration. Then it is asserted that consumers, as a rule, prefer butterine of about the same grade, than butter which is not always uniform in quality. Then the consumer, if this is true, is the "worker of evil," and if he prefers hog lard and some butter, to a first-class butter, then the occupation of the dairyman has gone, and hogs will in the future be the "all purpose" dairy animal that is being so persistently looked after by the dairymen. Now is this so, or are the great commission men in the city the real active enemy of good, genuine butter? As a rule, commission men deal in butterine, etc., as well as dairy butter, which is best seen by the enormous sales of the Thurbers of New York. The great bulk of dairy butter is sent to these men to be sold on commission, while butterine is purchased at manufacturers' prices. The profits on butterine are therefore very much larger than the commission on butter, and so we find these men all the time asserting that the bogus butters are "better than the bulk of the dairy butter," and that "their customers prefer it," and that they "sell it for exactly what it is," and that the retailers are the "ones who palm it off as genuine butter."

But the question may be pertinently asked, Who label these packages of butterine "Clover Hay Creamery," "Fern Hill Creamery," and very close imitations in name of most celebrated creameries? If their customers prefer the butterine to the genuine, why label these packages creamery? Why should they not brand their packages "choice butterine," from Grimes & Grimalkin, manufacturers, Lard St., Chicago, or New York, as the case may be?

It is right here that the dairymen are placed at a disadvantage. The goods are labeled what they are not; they are sold by the same men who sell the dairy butter; the dairymen are not there to point out the deception to the buyer, and the commission men sell the article which brings the most money to them for their "experience and tact as business men." Lastly, the law winks-at least in the States -at adulteration of foods, and the result is that dairy butter stands no show in the market, and the few creamery men play double: first to sell a very fine article to the butterine men, to mix with their deodorized lard; and second, it is thus for their interest, and the commission men, to make a wide difference between the price of dairy butter and the product of the creameries, so that between the them that there can be no suspicion; and

two butterine can find ready sale. By this it s seen that the danger is that butter is soon. at this rate, to be pushed aside, and made to defend its character, and get a permit to be sold as butter, and that at the hands of those directly and indirectly interested in the bogus butter trade.

Nor do I opine that these men are sinners above all others. There is fraud back of all this, or else all signs fail. Why do these manufacturers of deodorized lard send their circulars and agents to factories, public and private, and offer at "rates which must prove satisfactory to you," etc., etc., this butter, oil or deodorized lard to "keep up the average June butter yield of creameries?" Not that the bait catches every time, or once in a hundred, perhaps, but that this adulterant is being sold by the tens of thousand pounds monthly, none can doubt; and if they were to do so, had they been at Cincinnati at the National Convention, last December, all doubt would have been dispelled upon this point. So here genuine butter is again made to play a subordinate part to the manufactured article, or, what is the same, an admixture of butter and lard, and sent into the market as genuine creamery. The commission man, grocer, and consumer are each deceived, and the dairymen are brought to disgrace by a few of their own number.

The conventions this winter have denounced bogus butter, butterine—when city made—and pointed out all sorts of remedies, and resolved, time and again—but, if we remember aright, little or nothing has been said about this equal and yet more dishonorable deception, beside which silver-plated, white-metal dollars are quite respectable.

Now, what is the remedy for all this? "National legislation," says one; "Make so much good butter that the frauds won't sell," says another; "Drop the price of creamery butter to 20 cents on an average," says another; "Make dairy butter in the winter," speaks up a fourth; "Make good butter and let the consumer take his choice," says the fifth; and the sixth one remarks, sotto roce, "What are you going to do about it, anyway?"

Briefly, competition with high prices can never force these compounds out of the market; national legislation would not reach the case in point wholly; the average price of creamery butter at present cost of production cannot be sold at an average of 20 cents, and the "choice" business does not solve the problem, for the present high state of the art does not give a "show" oftentimes for a choice on the part of the consumer.

The remedy, we think, lies in all of these suggestions. Legislation to compel all foods to be sold for what they are, and to put each upon its exact merits. Winter dairying to give a yet more average production, and thus remedy the "evil" of very high and very low prices for butter. Introduce co-operation in butter-making, so as to raise the quality of the butter made, so that there would be no choice between poor butter and a represented good butterine, but reverse it, so that the butter would be good ; and lastly, let these co-operative creameries establish butter marts and deliveries to customers in the large cities, as part of the system of co-operation, and so conduct