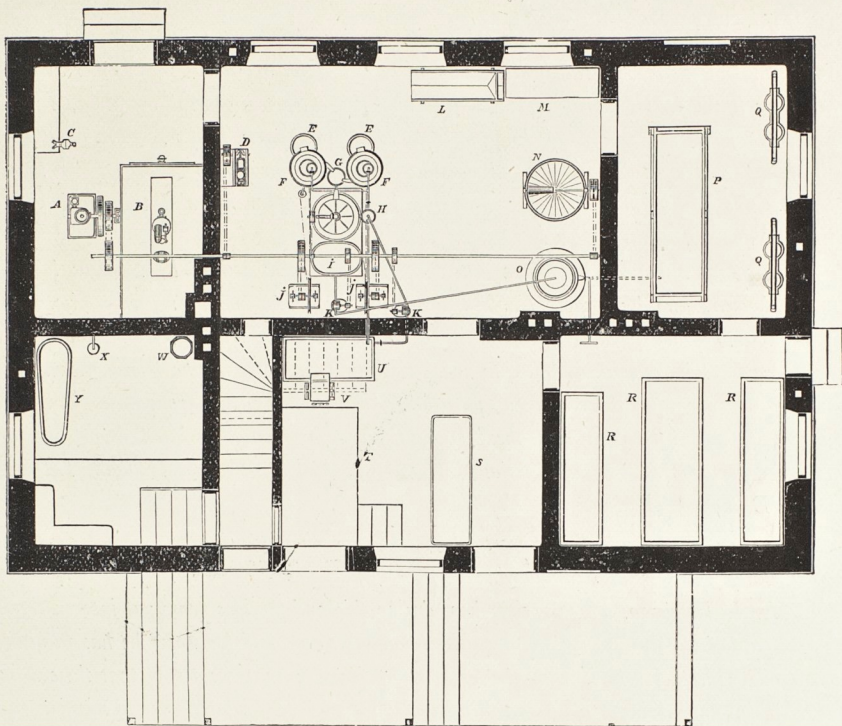


Plan for Radiator Dairy

with a daily 12,000 liters supply of milk.



Ur KB:s samlingar

Digitaliserad år 2013



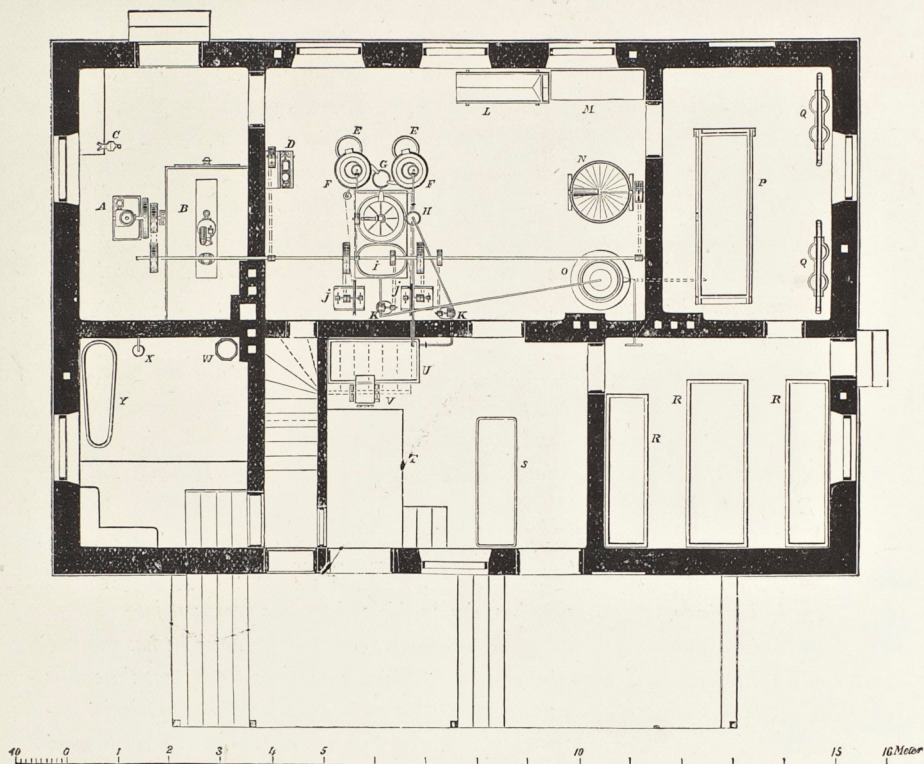
National Library
of Sweden

F. Radiators.
G. Pump-funnel.
H. Pasteurizing Apparatus.
I. Ice-water-tub.
J. Intermediates.
K. Milk-pumps.
L. Butter-trough.
M. Butter-closet.
N. Butter-worker.

T. Raised platform.
U. Receiving-tub.
V. Scales.
W. Stoves.
X. Douche-strainer.
Y. Bathtub.
Z. Bath-water-tank.
AA. Cold-water-tank.

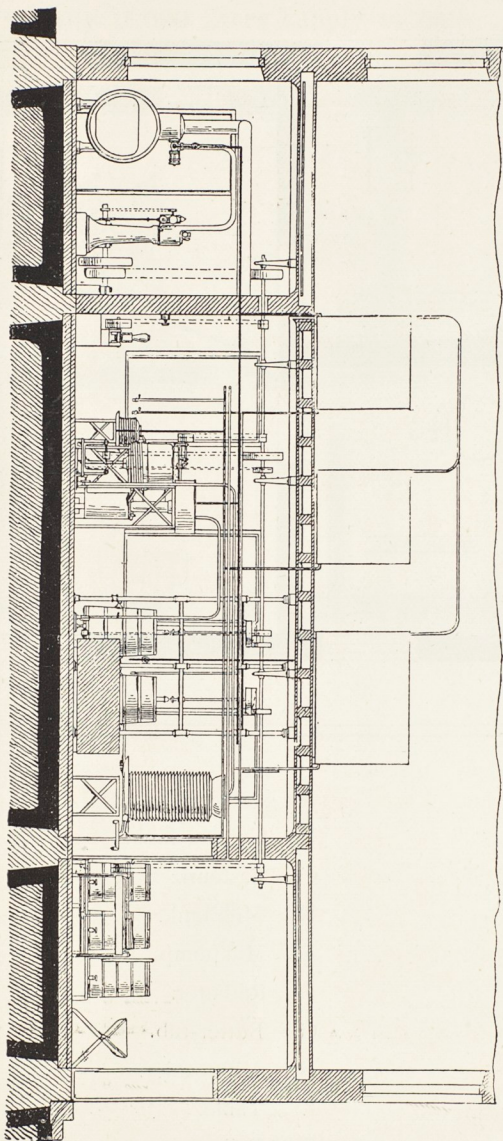
Plan for Radiator Dairy

with a daily 12,000 liters supply of milk.

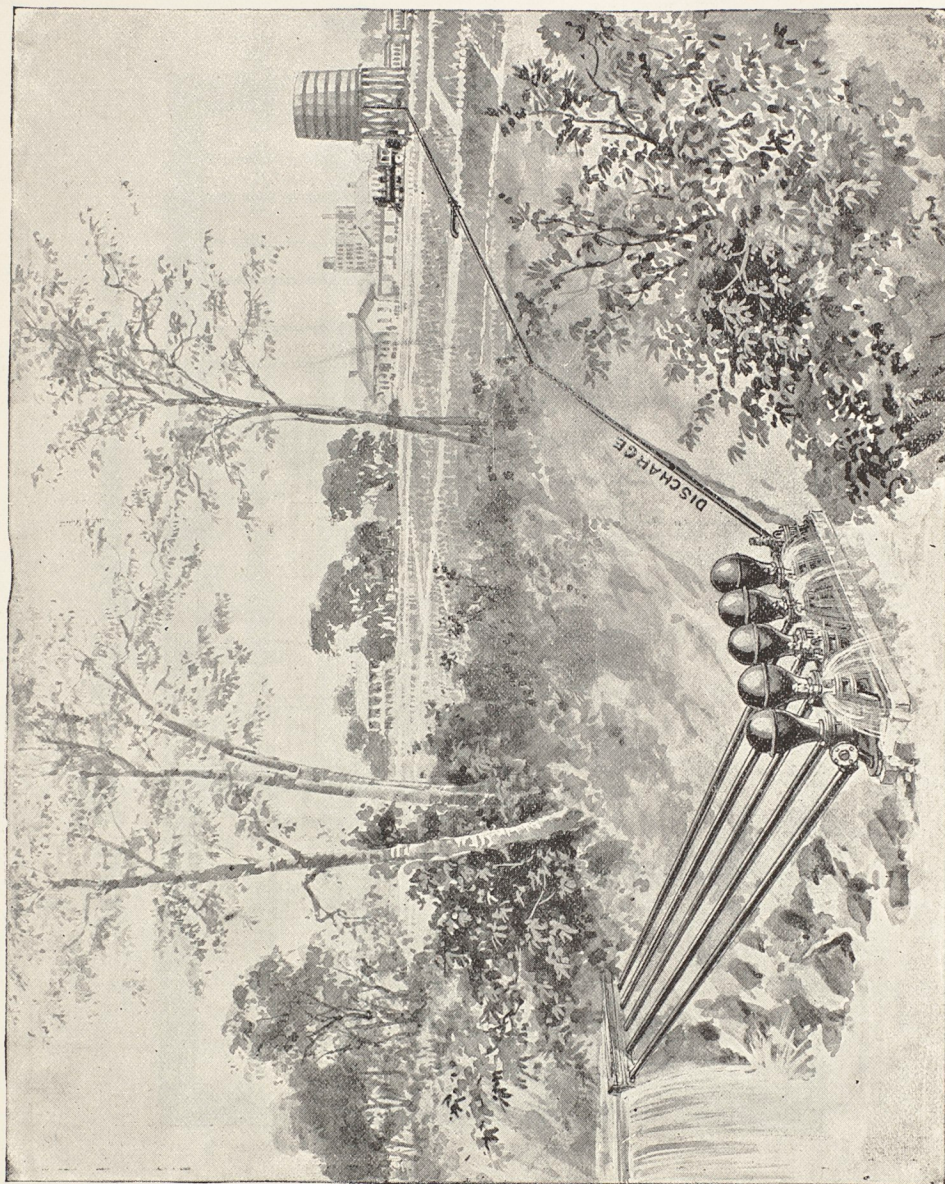


- A. Engine.
- B. Boiler.
- C. Vice.
- D. Pump.
- E. Butter-tubs.
- F. Radiators.
- G. Pump-funnel.
- H. Pasteurizing Apparatus.
- I. Ice-water-tub.
- J. Intermediates.
- K. Milk-pumps.
- L. Butter-trough.
- M. Butter-closet.
- N. Butter-worker.

- O. Skimmilk-cooler.
- P. Cheesetub.
- Q. Cheese presses.
- R. Cooling boxes.
- S. Dish-tub.
- T. Raised platform.
- U. Receiving-tub.
- V. Scales.
- W. Stoves.
- X. Douche-strainer.
- Y. Bathtub.
- Z. Bath-water-tank.
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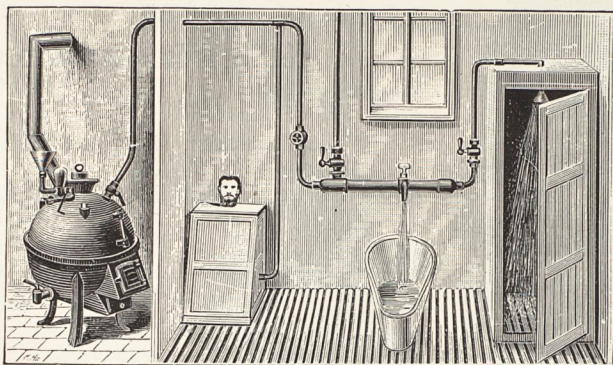


Intersection of Plan for larger Separator Creamery after the design
prize awarded in Antwerp 1894.



HYDRAULIC RAMS put up by I. Israelsson, Vasagatan 9, Stockholm.

Bath-rooms



can easily and with very little expense be arranged in creameries, provided they are fitted with a boiler. Water, from a tank in the upper story, is led into the water heater through the faucet shown in the illustration, and is instantly heated by the steam, which simultaneously enters the apparatus through the steam valve.

The temperature of the water is regulated by the steam valve.

The whole arrangement can be made anywhere at the following estimate.

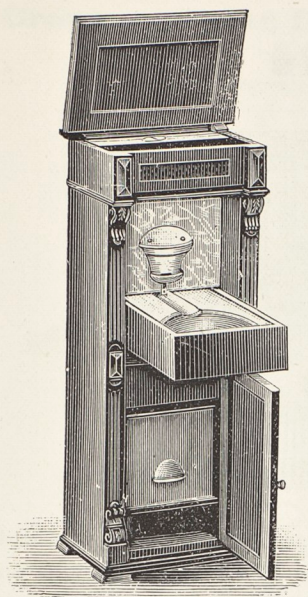
1 small boiler with feeding-pump	Kr. 260.—
Leading-pipes, douche, with fetting, about	» 117.—
1 water heaters	» 50.—
1 Bathtub	» 40.—
1 Steam-bath	» 15.—
1 Valve-pump No. 4	» 33.—
1 Water-tank	» 20.—
	Kr. 535.—

Testimonial of the water heater.

"I have bought a water heater from Mr. I. Israelsson, Stockholm, which is used here in bath-rooms. The apparatus, which is very simple and easily managed, fulfills its purpose excellently. Through the regulation of the steam- and water-cocks one can immediately obtain the desired temperature of the water and the apparatus is therefore especially adapted for bath-rooms and creameries.

Torsåkers creamery, June 8th 1893.

Candidate **Edward Blomkvist,**
Manager."



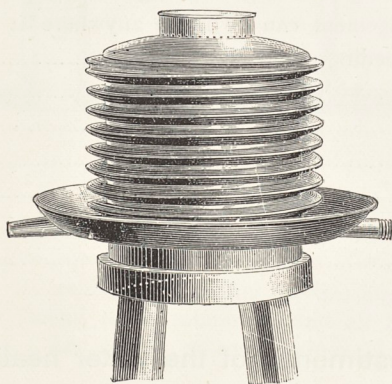
Wash-stand.

The illustration shows the wash stand open.
When closed it resembles an elegant cabinet.

Price Kr. 135.—

Cream-cooler.

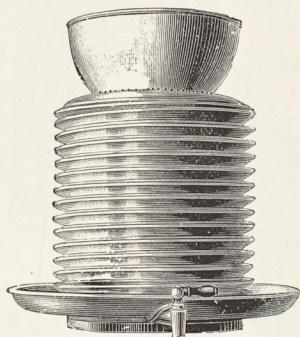
System "Gegenstrom".



No.	Height	Diameter	Cooling-power per hour	Price
0	27 centimeter	25 centimeter	100 Liter	Kr. 65.—
1	29 »	32 »	200 »	» 85.—
2	30 »	41 »	300 »	» 110.—
3	36 »	50 »	500 »	» 150.—
4	36 »	62 »	800 »	» 200.—

Milk-cooler.

System "Gegenstrom".

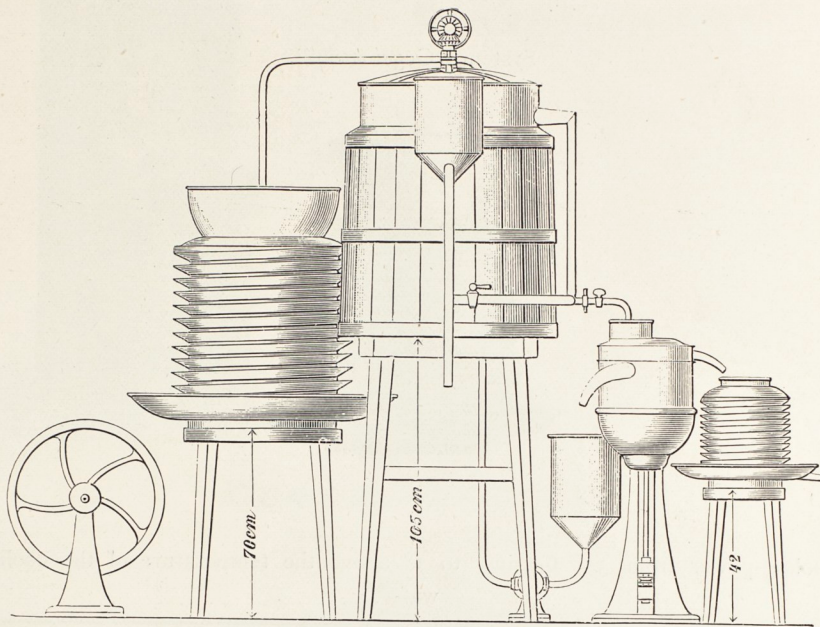


Cooling-power from 35° Celsius, to 1° above the temperature of the cooling water.

No.	Height	Diameter	Cooling-power per hour	Price
00	27 centimeter	25 centimeter	100 Liter	Kr. 60.—
0	35 »	25 »	180 »	» 75.—
1	43 »	32 »	300 »	» 90.—
2	50 »	41 »	500 »	» 125.—
3	60 »	50 »	800 »	» 175.—
4	64 »	62 »	1200 »	» 210.—
5	75 »	76 »	1800 »	» 300.—



Putting up of Pasteurizing Apparatus, milk- & cream-cooler, milkpump and separator.



After having been put up as shown by the figure, the machinery operates in the following manner: The new milk is drawn by the milkpump from the receiving tank to the funnel of the apparatus, whence it runs to the bottom of the apparatus, where it is heated from 65° to 70° Celsius, rises upward and runs out through the outlet above. When the milktank has been emptied and the pasteurized milk no longer is pressed upward by the flowing milk, the faucet at the bottom of the apparatus opens, whereby it is thoroughly emptied. The pasteurizing apparatuses, are, as a rule, put up accordingly to the Danish method, considerably lower and so that the upper out-letting-tube comes in level with the top-cover of the separator, and must in consequence — when the receiving milk-tank has been emptied — as large a quantity as held by the apparatus, be drawn through a faucet at its base, which causes much trouble and loss of butter-fat.

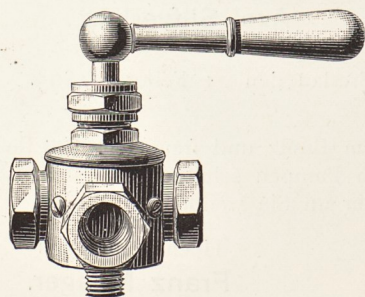
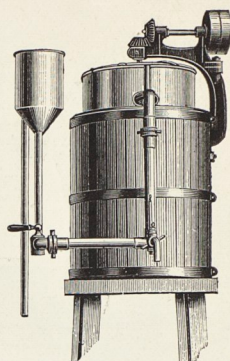
Pasteurizing Apparatus

of improved construction.

The improvement lies in the arrangement of the feeding funnel and the emptying of the apparatus, whereby the milk-tank above the pasteurizer, is not required. As known it is necessary that at the completion of the pasteurizing — when ordinary apparatuses are in use — the quantity contained in the apparatus, is tapped through an outlet at its base. This operation, which, especially when large apparatuses are employed, is very troublesome and inconvenient, is avoided in the construction shown above. It is of special importance that the pasteurizing apparatus is sufficiently large, so that the milk can retain a heat of 70° Celsius or more, during about 10 minutes before it leaves the apparatus. The heating of the larger apparatuses, which can be accomplished by waste-steam, is exceedingly cheap, whereas the smaller apparatuses require fresh steam.

The apparatus consists of a tinned copper cylinder supplied with 2 lids. The inner copper-cylinder is joined to and surrounded by a steam cylinder made either of galvanized iron-plate or of copper. Further the steam-cylinder is covered with wood in order to retain the heat. The copper cylinder is provided with a stirring apparatus to prevent the milk being scorched. The stirring apparatus is driven by the axle which is furnished with a fast and loose pulley. The power is transmitted from the axle to the stirring apparatus by means of cog wheels.

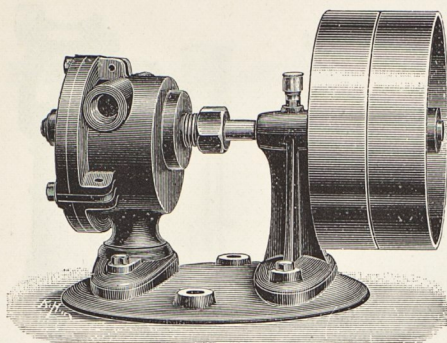
No. 1	Milkpasteurizer	heats up to 65°	800	liters per hour.....	Kr. 240.—
» 2	»	»	»	»	» 300.—
» 3	»	»	»	»	» 400.—
» 4	»	»	»	»	» 500.—
» A	Creampasteurizer	»	»	»	» 150.—
» B	»	»	»	»	» 175.—



Three-way-faucet

for waste-steam.

25 mm.....	Kr. 22.—
32 »	» 31.—
38 »	» 35.—
50 »	» 60.—
63 »	» 83.—



Milk-pumps.

These pumps which have for several years been delivered and put up by me, in this country and abroad, have gained general recognition everywhere. They are especially adapted for drawing milk, new and skimmed, butter-milk and whey within the dairies and work without difficulty at a suction height up to about 3 meters.

No.....	0	1	2	3	4
Diameter of pipes in m. m.....	13	25	32	25	32
Draws liter per hour	1,200	2,000	3,000	5,200	8,000
Speed per minute.....	400	350	300	160	160
Diameter of pulleys m. m.....	100 × 30	100 × 40	125 × 55	255 × 60	225 × 60
Average weight kg.	8	16	28	32	38
Price Kr.	45	65	90	100	120

Testimonial.

»Mr I. Israelsson has fitted two milk pumps in our dairy in connection with the insertion of conduits, partly for drawing the new milk from the receiving tank to the separator, partly for drawing the skimmed milk from the separator to the cooling-room where the temperature of the milk is lowered to about 6° Celsius, by a cooling apparatus, furnished by Mr I. Israelsson. We testify that the arrangements are most practical and fulfill all they claim. The dairy altogether works much easier than before when the work was disturbed by the transportation of the milk to and fro within the dairy.

The cooling apparatus for milk and cream, furnished by Mr. I. Israelsson, has proved to be of much better construction than others we have tried.

Stockholm October 11:th 1893.

Victoria Dairy Co. Limited

Axel Silfverling.»

»Breslau den 21 Februar 1895.

Herrn I. Israelsson, Stockholm.

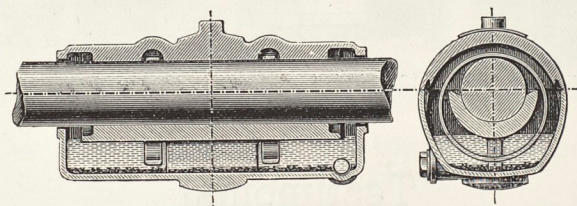
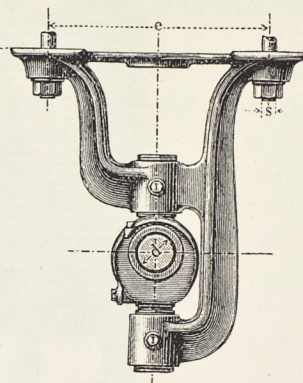
Ihr Werthes vom 14:ten ist in meinem Besitz und freue ich mich Ihnen mittheilen zu können, dass ich mit Ihren Pumpen sehr zufrieden bin. Bei weiteren Bedarf werde ich mich gern wieder an Sie wenden.

Hochachtungsvoll
Franz Maager.

Self-oiling hangers.

In the lower cup of these bipartitioned bearings is an oil-receptacle which is tightly closed on all sides. One or several rings in the bearings hang on the shaft, to which, while rotating, they convey oil, equally distributing it on the surface of the bearing, after which it is reconveyed to the oil-receptacle, from which the oil circulates continually as long as the shaft is in motion.

The bearings close themselves and the oil can not escape through their seams not at their ends, all this without the use of stopping means.

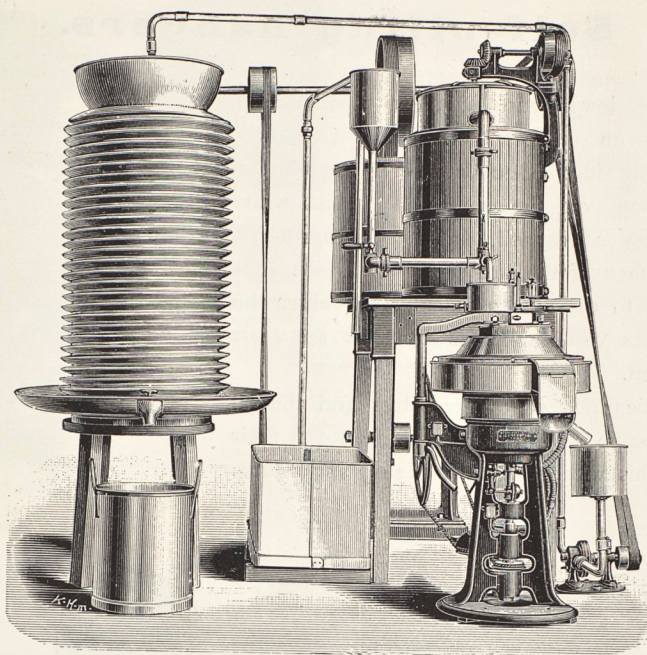


The hangers are more oilsaving than others and repletion of oil is not required more than 2 to 4 times a year, according to the rapidity of the circulation and the dimension of the oil receptacle. The dripping-cups necessary on the other hangers are not needed and consequently, entirely dispensed with. Through these hangers, a great deal of time is saved and the expense for the oiling of the shafting, greatly reduced.

Price with 51 mm. axlehole Kr. 25.--

Hangers made after the above construction are furnished by me for de Laval's steam-turbine, Nya Aktiebolaget "Atlas", and other modern work shops.





Testimonial

from

Mr G. ASPLUND, farmer,

Kusta, Westerås, Sweden.

Having purchased and used the "Radiator" during 4 months at my farm Kusta, I have pleasure in giving the following testimonial.

All the milk from my farm has been worked by the "Radiator" and it has taken 23 and at most 25 litres of milk to make 1 kilogram of butter, which result I consider to be very good.

The capacity of the machine is 650 to 700 litres of milk pr hour and the clean skimming of the small quantity of buttermilk as well as of the skimmilk can be pointed out as perfect. Several analysis has shewn the remaining fat of the skimmilk to be only 0.07—0.08 %.

The pasteurising has been done at a temperature of 65° Celsius and of account of this operation I would propose to take a boiler big enough at the start.

The butter is very fine, keeps well and has in the buttertests taken as high points as 12.7—13.0. As a result, I have at all times received the highest market price for the same.

The machine is easy to manage and the working of the butter is done conveniently. The method as a whole is very simple and timesaving and the space necessary for the whole outfit is small. My dairywoman who at first seemed to object to and be very doubtful about the "Radiator", has after due trial been convinced of its superiority and now considers the Radiator dairy to be the best and most easily managed. On account of all my observations and practical knowledge about the "Radiator" I have a full and good reason to recommend it to others and I consider that the "Radiator" ought to be preferred before any other system of dairy machines both when erecting new or making alterations in old dairies.

Westerås & Kusta the 31st of Jan. 1895.

G. Asplund.

Estimate for the apparatuses illustrated on opposite page:

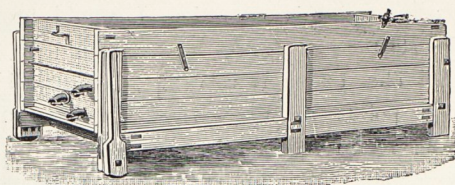
1 radiator for 700 litres pr hour	Kr. 1,000.—
1 pasteurizer.....	» 400.—
1 table	» 60.—
1 tub for ice water	» 40.—
1 milk basin for 400 litres	» 80.—
2 milk pumps	» 130.—
1 milk cooler	» 210.—

Total Kr. 1,920.—

Radiator for 700 litres pr hour	Kr. 1,000.—
» » 500 » » »	» 800.—
» » 200 » » »	» 425.—

Model A.**Cheese tubs.**

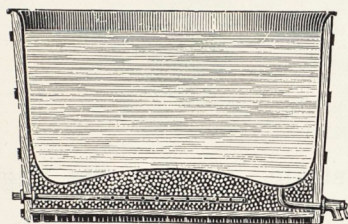
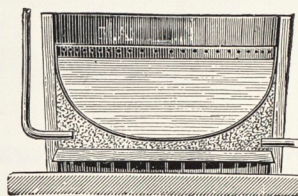
The basin of doubly
tinned steel sheet.



To hold liters.....	500	650	750	850	1000	1250	1500	1750	2000
Price Kronor	200	215	225	235	245	265	285	310	335

Round Cheese tubs.

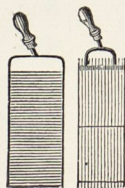
The basin of doubly tinned copper sheet.

Model B.**Model C.**

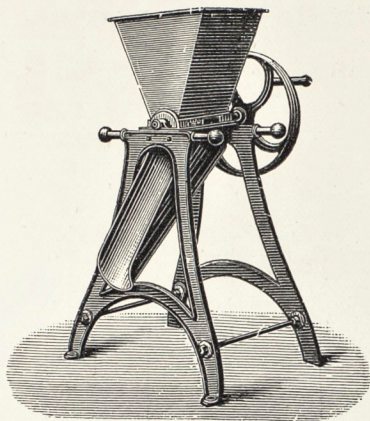
To hold liters.....	300	520	650	780	900	1000	1200
Price Kronor	165	185	210	245	275	300	325

Curd breakers.

Price..... Kronor 7.--

**Curd knives.**

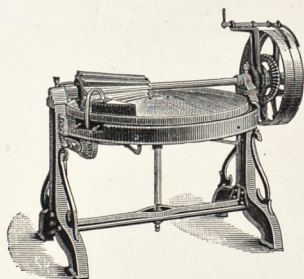
Price pr pair..... Kronor 19.--



Curd mills.

For the tub Kronor 30.—

On high stand » 40.—

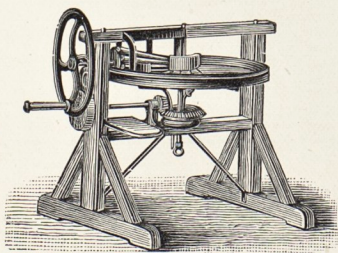


Butter Worker with pulleys on iron stand.

Size of table.

Diameter millimeter 900 1150

Kronor 150 200



Butter Worker. on wood stand for hand power.

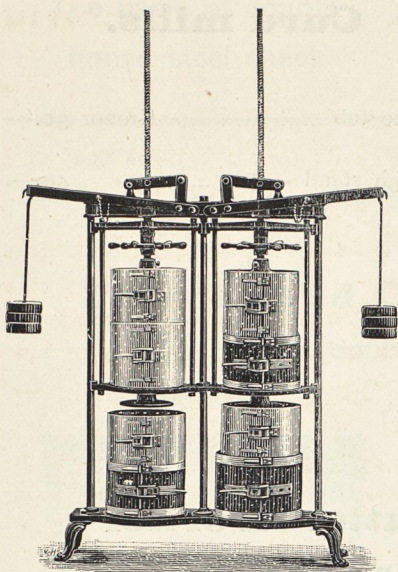
Size of table.

Diameter millimeter 740 890

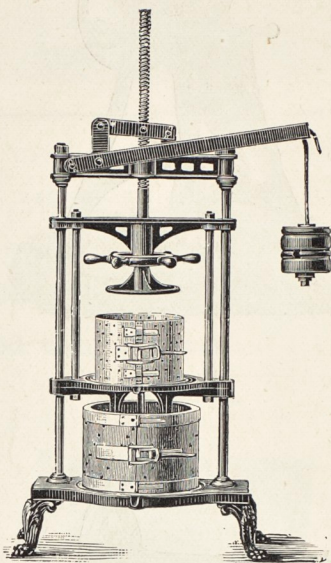
Price Kronor 100.— 120.—

Double cheese press

with cheese vats to open.

**Single cheese press**

with cheese vats to open.



Price of press for 8 cheeses Kr. 140.

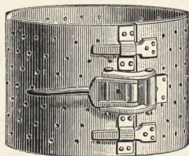
Price of press for 4 cheeses Kr. 80.

» » » » 4 » » 120.

» » » » 2 » » 75.

Cheese vats.

Opened and closed instantly.



Diameter millimeter	170	280	300	320	350	400
Height — »	280	200	250	250	300	200
Price Kronor	8.10	10.—	11.—	12.50	13.50	15.—