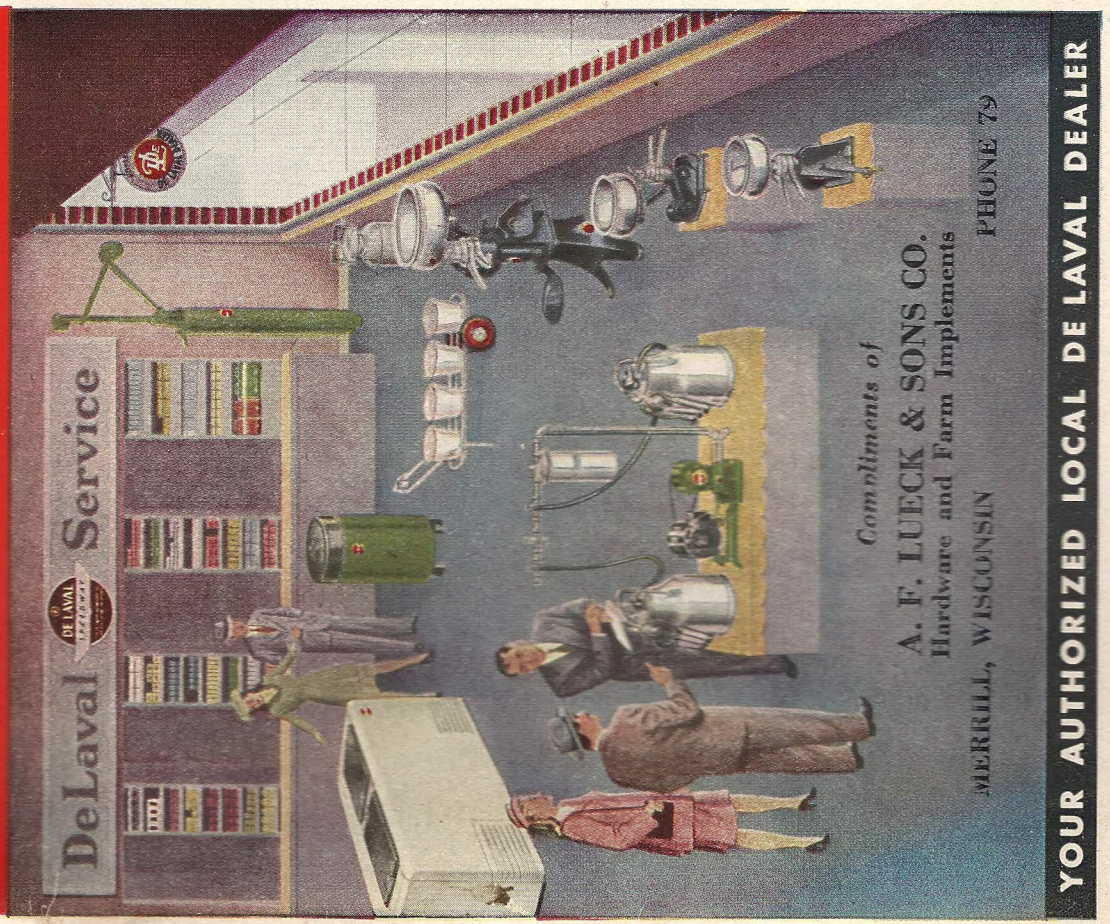
DE LAVAL Year Book 1948

HANDY REFERENCE

ALMANAC · WEATHER PREDICTIONS
FARM, DAIRY AND HOUSEHOLD INFORMATION



YOUR AUTHORIZED LOCAL DE LAVAL DEALER

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FOR BETTER FARM INCOMES

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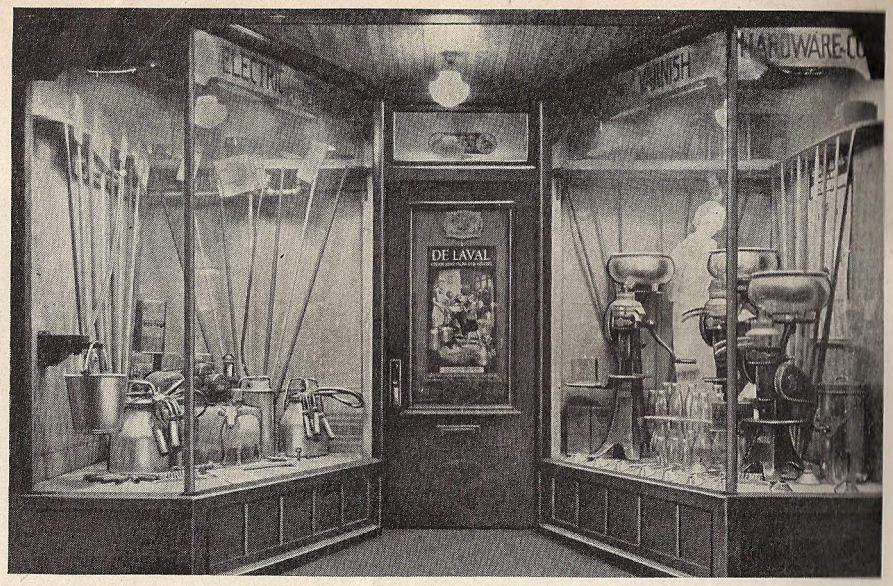
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See Your De Laval Dealer First!



Remember that when you purchase a new De Laval product from your local De Laval Dealer who sends you this book, you have established a relationship with a local business man who above all else is desirous of winning and retaining your good will and continued patronage. He is anxious to serve you well. He is prepared at all times to render prompt, expert service. He is trained in this important work and maintains a complete stock of genuine De Laval replacement parts, which insures uninterrupted use of your De Laval equipment. This is an all-important consideration when buying new equipment.

MERRILL HISTORICAL SOCIETY

DE LAVAL

HANDY REFERENCE

Year 1948 Book

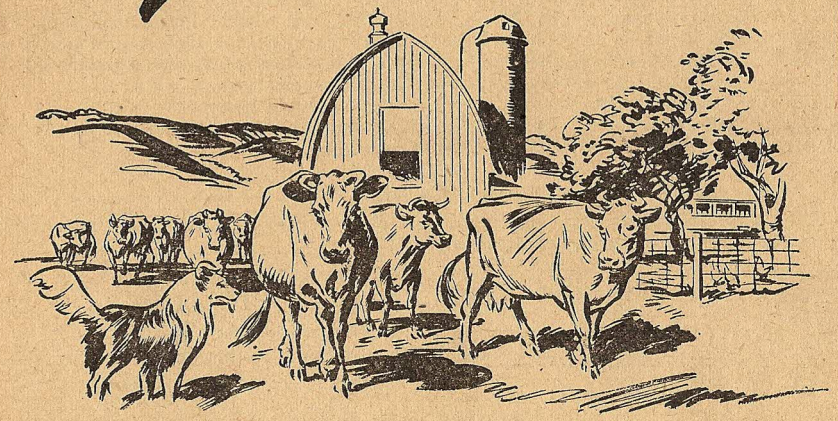


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Published by

THE DE LAVAL SEPARATOR COMPANY

165 Broadway, New York 6 — **427 Randolph St., Chicago 6**

DE LAVAL PACIFIC COMPANY
61 Beale St., San Francisco 5

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SA 516-48

PRINTED IN U.S.A.



ECLIPSES, HOLIDAYS

AND OTHER STATISTICS

Here is annual information you will find interesting. Read the explanation of the calendar pages carefully before consulting them.

ECLIPSES FOR 1948

There will be three eclipses in 1948, two of the Sun and one of the Moon.

I: A Partial Eclipse of the Moon, April 23rd, not visible here: beginning and ending visible generally in Asia and the Indian Ocean, except the western parts, the antarctic regions, Australia, the Pacific Ocean, except the southeastern part, and the extreme western and northwestern part of North America.

II: An Annular Eclipse of the Sun, May 8-9, invisible here.

III: A Total Eclipse of the Sun, November 1st, invisible here. Visible to portions of Africa, to Australia and parts of Oceans adjoining.

NATIONAL HOLIDAYS FOR 1948

Each state determines what holidays it will observe. However, the following holidays probably will be observed by all states in 1948:

January 1—New Year's Day
February 22 (23)—Washington's Birthday
May 30 (31)—Decoration or Memorial Day (except in Ala., Ga., La., Miss., N.C. and S.C.)
July 4 (5)—Independence Day
September 6—Labor Day
November 11—Armistice Day
November 25—Thanksgiving Day
December 25—Christmas Day

CHURCH DAYS, 1948

Epiphany	January 6	Easter Sunday	March 28
Septuagesima Sunday	January 25	Low Sunday	April 4
Sexagesima Sunday	February 1	Rogation Sunday	May 2
Quinquagesima Sunday	February 8	Ascension Day	May 6
Shrove Tuesday	February 10	Pentecost-Whit Sunday	May 16
Ash Wednesday	February 11	Trinity Sunday	May 23
Quadragesima Sunday	February 15	Corpus Christi	May 27
Palm Sunday	March 21	Advent Sunday	November 28
Good Friday	March 26	Christmas Day	December 25

EMBER DAYS FOR 1948

February 18, 20 and 21
May 19, 21 and 22
September 15, 17 and 18
December 15, 17 and 18

SEASONS FOR 1948

Spring begins 11:57 A.M. March 20
Summer begins 7:11 A.M. June 21
Autumn begins 10:22 P.M. September 22
Winter begins 5:34 P.M. December 21

EXPLANATION OF THE CALENDAR PAGES

The sun and moon rise and set times are given in Standard Time for the latitudes of Boston (North) and Charleston (South). They are correct for these latitudes at each Standard Time Meridian of longitude but will vary a few minutes if you are north or south of these latitudes, or east or west of your Time Meridian. Only moon rise and set times which occur in the hours of darkness are given. The sun slow or fast column indicates the difference between mean (Standard) time and apparent solar time. "Sun Slow 4" shows that the sun will not arrive at the Time Meridian until 12:04. The Moon's Place column indicates which constellation the moon is in on the date given.

JANUARY, 1948

Thirty-one Days • First Month

MOON'S PHASES, E. S. T.
☾ L. Quar., 3rd, 6:13 A.M.
● N. Moon, 11th, 2:44 A.M.
☽ F. Quar., 19th, 6:32 A.M.
○ F. Moon, 26th, 2:11 A.M.

Days of Month	Days of Week	Historical Events	Moon's Place	Lat. N. States: Sun rises	Lat. N. States: Sun sets	Lat. N. States: Moon rises	Sun Slow	Lat. S. States: Sun rises	Lat. S. States: Sun sets	Lat. S. States: Moon rises
				H. M.	H. M.	H. M.		H. M.	H. M.	H. M.
1	Th	Greater New York Gov't began, 1898	♑	7 30	4 37	10 35	4	7 03	5 05	10 44
2	Fr	Bad Russian defeat, 1917	♑	7 30	4 38	11 47	4	7 03	5 06	11 48
3	Sa	Typhoon in Philippine Str'ts, 1931	♑	7 30	4 38	morn	5	7 03	5 06	morn
2nd Sunday after Christmas		Day's Length: Northern 9.09; Southern 10.04								
4	Su	Utah became a state, 1896	♑	7 30	4 39	0 56	5	7 03	5 07	0 51
5	Mo	Captain Dreyfus degraded, 1895	♒	7 30	4 40	2 05	5	7 03	5 08	1 52
6	Tu	New Mexico became a state, 1912	♒	7 30	4 41	3 13	6	7 04	5 09	2 53
7	We	1st Soviet ambassador arrived, 1934	♏	7 30	4 42	4 20	6	7 04	5 10	3 53
8	Th	Fort erected at Hartford, Conn., 1633	♏	7 30	4 43	5 25	7	7 04	5 11	4 53
9	Fr	1st shot in Civil War, 1861	♐	7 30	4 44	6 27	7	7 04	5 11	5 52
10	Sa	Standard Oil Co. incorporated, 1870	♐	7 29	4 45	7 23	8	7 04	5 12	6 46
1st Sunday after Epiphany		Day's Length: Northern 9.17; Southern 10.09								
11	Su	Michigan Territory created, 1805	♐	7 29	4 46	sets	8	7 04	5 13	sets
12	Mo	1st woman senator elected, 1932	♑	7 29	4 47	5 55	8	7 03	5 14	6 25
13	Tu	Theatre fire at Boyertown, Pa., 1908	♑	7 28	4 49	6 59	9	7 03	5 15	7 22
14	We	Earthquake in Jamaica, 1907	♒	7 28	4 50	8 01	9	7 03	5 16	8 18
15	Th	Queen Elizabeth crowned, 1559	♒	7 28	4 51	9 03	9	7 03	5 17	9 14
16	Fr	Pan-Amer. Conference opened, 1928	♒	7 27	4 53	10 04	10	7 02	5 18	10 10
17	Sa	Virgin Islands purchased, 1917	♓	7 27	4 54	11 06	10	7 02	5 19	11 06
2nd Sunday after Epiphany		Day's Length: Northern 9.29; Southern 10.17								
18	Su	Rock slide at Niagara Falls, 1931	♓	7 26	4 55	morn	10	7 02	5 19	morn
19	Mo	Presidential Succession Act, 1886	♈	7 26	4 56	0 11	11	7 02	5 20	0 03
20	Tu	Eng. recognized U.S. independ., 1783	♈	7 25	4 57	1 17	11	7 01	5 21	1 03
21	We	1st printing press in America, 1639	♈	7 25	4 58	2 28	11	7 01	5 22	2 06
22	Th	Queen Victoria died, 1901	♉	7 24	4 59	3 42	12	7 01	5 23	3 14
23	Fr	Internat. Opium Convention, 1912	♉	7 23	5 00	4 57	12	7 00	5 24	4 24
24	Sa	1st nat. game preserve author., 1905	♊	7 22	5 02	6 08	12	7 00	5 25	5 33
Septuagesima Sunday		Day's Length: Northern 9.42; Southern 10.27								
25	Su	League of Nations proposed, 1918	♊	7 21	5 03	7 12	12	6 59	5 26	6 37
26	Mo	Michigan became a state, 1837	♋	7 20	5 04	rises	13	6 59	5 27	rises
27	Tu	Sam. Gompers, labor leader, b., 1850	♋	7 19	5 06	6 51	13	6 58	5 28	7 12
28	We	Steamer "Georgia" burned, 1854	♌	7 18	5 08	8 12	13	6 57	5 29	8 24
29	Th	Kansas admitted to the union, 1861	♌	7 17	5 09	9 29	13	6 57	5 30	9 34
30	Fr	Charles I of England beheaded, 1649	♍	7 17	5 11	10 42	13	6 56	5 31	10 40
31	Sa	U.S. forces invaded Kwajalein, 1944	♍	7 16	5 12	11 54	14	6 56	5 32	11 44

WEATHER FORECAST

Northeast: 1-4, cold, stormy; 5-8, continued cold; 9-13, clearing, rise in temperature; 14-19, mild, damp; 20-25, generally unpleasant; 26-31, clear, cold weather.

Southeast: 1-3, high winds; 4-8, rainy spell; 9-14, cloudy, fair; 15-18, seasonal weather; 19-22, rainy, damp; 23-26, strong winds; 27-31, rain along southern coast.

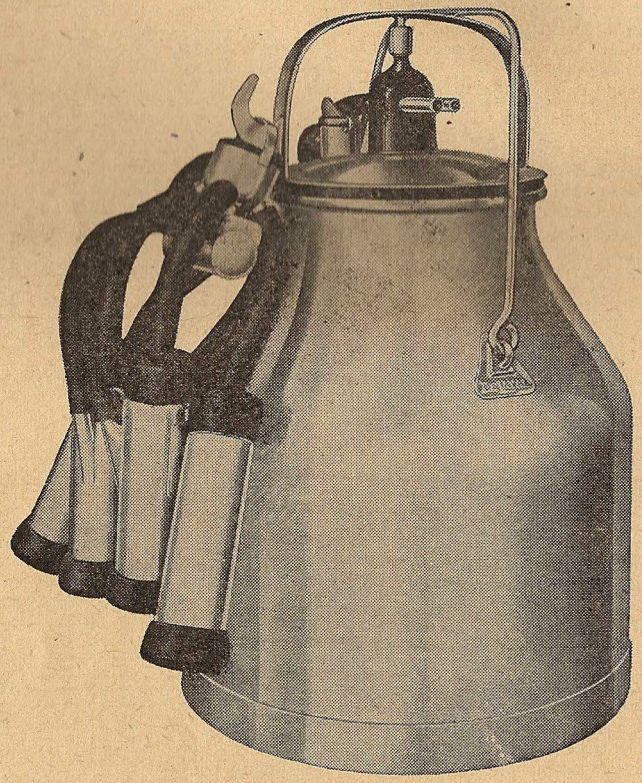
Northwest: 1-5, possible snow flurries; 6-9, extremely cold; 10-14, continued cold; 15-19, high winds, crisp and cold; 20-23, snow flurries; 24-27, changing to rain; 29-31, unsettled.

Southwest: 1-4, generally fair; 5-10, increasing winds; 11-13, possible snow flurries; 14-18, clearing, moderate; 19-23, rain generally; 24-28, clearing, rise in temperature; 29-31, continued pleasant.

BETTER MILKING—De Laval Milkers provide the best milking in every sense of the word. They milk fast, clean and completely and in a manner that is pleasing to the cow. Better milking means better results.

THE NEW POSTWAR DE LAVAL MAGNETIC SPEEDWAY MILKER

"There's More Money in Milking the De Laval Way!"



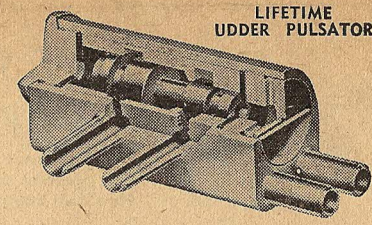
The New De Laval Magnetic Speedway Milker Unit speaks for itself—in any man's language! In the first place, it delivers the best, fastest and cleanest brand of milking performance you have ever seen. And it is a marvel of handling convenience—easy to carry and to operate. It assembles and disassembles quickly and easily. It is tough and durable with practically every metal part, including every part the milk touches, made of rust-proof, highly polished stainless steel. Aside from the prime consideration of its better milking performance, you will undoubtedly find the new De Laval Magnetic Speedway Unit the easiest and most convenient to operate and to clean and sterilize that you have ever seen or handled. Prove this for yourself.

The new, permanently bright stainless steel "Sani-Cover" operating top is as easy to clean as a saucer. Forever rust-proof, it is highly finished inside and out, with no cracks to harbor bacteria or slow up your cleaning and sterilizing operation. Even the handle is made of stainless steel and shaped to fit your hand. The new "Sani-Check Valve" chamber has an improved attaching device for quicker assembly and disassembly. The new "Easy-Clean" milk cock, of stainless steel, is easier to clean and even after long use seals as tightly as when new.

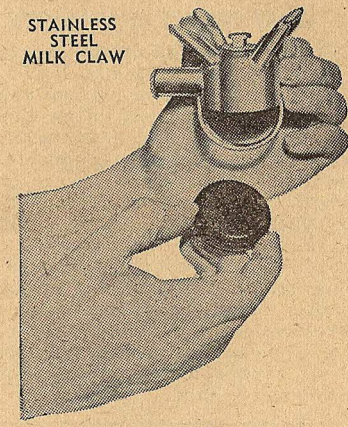
The Speedway stainless steel "Sani-Claw" is of new and exclusive design which makes possible improved sanitation and easier, quicker cleaning. Its design, which includes a removable rubber bottom, enables straight-through brushing—fast and thorough. You can see straight through the Speedway "Sani-Claw" which means that you have *visible sanitation* at this important point. You *know* that it's clean because you can *see* that it's clean!

The famous one-moving-part De Laval Speedway "Lifetime" Udder Pulsator has been made still more efficient and dependable. Piston travel is now less than ever . . . only one-quarter of an inch! A new cylinder insert of special metal greatly increases its long operating life. The new Speedway "Lifetime" Udder Pulsator is proof against interference from dust, flies, hair or straw. It assures Better Milking for more years at less cost. De Laval Engineering skill is well illustrated by this simple, positive and dependable device.

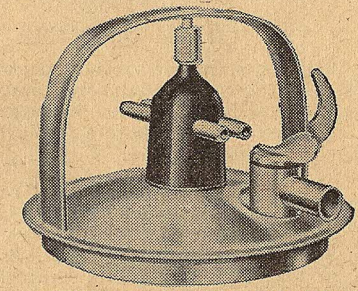
The new De Laval Magnetic Speedway Pulso-Pump retains De Laval's long-proved, low speed, rotary principle. New improvements include locating oil reservoir in pump base, economical metered lubrication and rotor shaft mounted on stainless steel ball bearings. In every way it assures best milking, uninterrupted service and low operating cost.



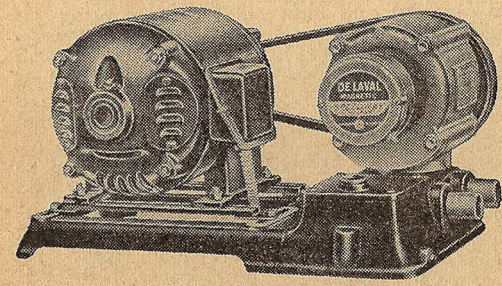
LIFETIME UDDER PULSATOR



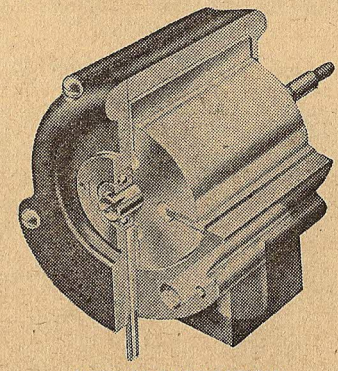
STAINLESS STEEL MILK CLAW



STAINLESS STEEL OPERATING TOP



NEW DE LAVAL SPEEDWAY PULSO-PUMP



METERED LUBRICATION



PRESSURE COOKERY

IN THE FARM KITCHEN

The pressure pan is the modern housewife's magic wand. With it she prepares taste tempting meals in a fraction of usual time. How does she do it? Here are some interesting basic facts.

WHAT ARE ITS ADVANTAGES?

The first advantage of pressure cookery is speed. Used intelligently, it will save valuable hours, reducing the time required for cooking many foods to one third or less. And less cooking time, means less fuel, less wear of kitchen equipment.

More importantly, pressure cookery retains the fresh, full flavor of fruits and vegetables. It keeps maximum vitamin and mineral values in the food. It cooks cereals, even the ones that used to take hours, thoroughly, completely and rapidly. It cooks tough meats tender quickly.

Pressure cookery, of course, is limited to moist heat cooking. Frying, broiling, baking, roasting, and other cooking methods will still be used.

WHAT TYPE IS BEST?

There are many kinds of pressure pans and many sizes. Which kind and size you buy depends entirely on your needs and preferences. The best procedure is to study the various makes carefully, comparing their advantages and cost.

Compartment pans or dividers will add to the utility of your pressure pan. And two pressure pans are much better than one. In fact, with a large family, two is the minimum number.

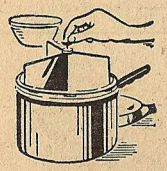
Care for your pressure pans as you would any fine cooking utensil. Follow the manufacturer's directions as to the care of valves, gaskets, etc. And be sure to follow the maker's directions as to operation very exactly.

THE SEVEN STEP PROCEDURE

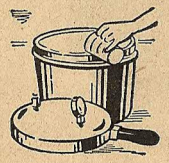
While operation of pressure pans may vary slightly, these definite steps must be taken. Once learned, pressure cookery is just as easy and just as safe as old fashioned hot water cookery.



1. Prepare food as for regular cooking. Clean and cut vegetables and fruits as desired. Brown meats as instructed in recipes. Boil water before adding cereals, macaroni, etc.



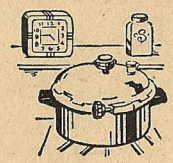
2. Place food in pan, using trivet, rack or dividers as necessary. Be sure food will not clog steam outlet while cooking. Allow for expansion of rice, etc.



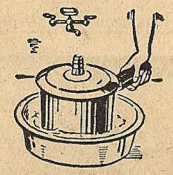
3. Add the amount of water required, usually ¼ cup for foods requiring less than 10 minutes cooking, ½ cup for periods up to 20 minutes. Place cover on pan and seal as directed.



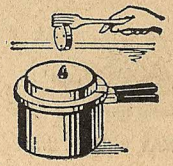
4. Exhaust air from pan by heating rapidly with vent open, or by opening vent slightly after pressure is built up, as directed by maker. Not necessary if pan has automatic exhaust.



5. Close steam vent and begin counting cooking time (or set timer, if you have one). Less heat will maintain steam pressure during cooking. Reduce heat or move to cooler part of range.



6. When cooking is complete, reduce pressure rapidly by cooling the pan in water, unless slow cooling is directed or desired for personal reasons.



7. Open steam vent or lift weight to break vacuum in pan, if necessary. Remove cover and serve food. *Never* remove cover if there is pressure in the pan.

FEBRUARY, 1948

Twenty-nine Days • Second Month

Days of Month	Days of Week	MOON'S PHASES, E. S. T. / HISTORICAL EVENTS	Moon's Place	Latitude of Northern States: Sun rises H. M.	Sun sets H. M.	Moon rises H. M.	Sun Slow	Latitude of Southern States: Sun rises H. M.	Sun sets H. M.	Moon rises H. M.
		☾ L. Quar., 1st, 7:31 P.M. ● N. Moon, 9th, 10:02 P.M. ☽ F. Quar., 17th, 8:55 P.M. ○ F. Moon, 24th, 0:16 P.M.								
Sexagesima Sunday		Day's Length: Northern 9.58; Southern 10.38								
1	Su	1st automobile insurance issued, 1898	♒	7 15	5 13	morn	14	6 55	5 33	morn
2	Mo	Battle of Paterson Creek, 1864	♒	7 14	5 14	1 03	14	6 55	5 34	0 46
3	Tu	Earthquake in New Zealand, 1931	♏	7 13	5 15	2 12	14	6 54	5 35	1 48
4	We	Charles Lindbergh born, 1902	♏	7 12	5 16	3 18	14	6 53	5 35	2 49
5	Th	U.S. recognized by Sweden, 1783	♏	7 11	5 18	4 21	14	6 52	5 36	3 47
6	Fr	Fire at Hotel Royal, N. Y., 1892	♐	7 10	5 19	5 17	14	6 52	5 37	4 42
7	Sa	1st telephone N.Y. to Chicago, 1892	♐	7 09	5 20	6 07	14	6 51	5 38	5 33
Quinquagesima Sunday		Day's Length: Northern 10.14; Southern 10.49								
8	Su	Earl of Mayo assassinated, 1872	♑	7 08	5 22	6 50	14	6 50	5 39	6 18
9	Mo	Liner "Gen. Chanzy" wrecked, 1910	♑	7 07	5 23	sets	14	6 49	5 40	sets
10	Tu	Upper & Lower Canada united, 1841	♒	7 06	5 24	5 53	14	6 48	5 41	6 13
11	We	Japanese constitution formed, 1889	♒	7 04	5 25	6 56	14	6 47	5 42	7 09
12	Th	Gold discovered in Australia, 1851	♒	7 02	5 26	7 58	14	6 46	5 43	8 05
13	Fr	Isaac Hull died, 1843	♓	7 01	5 27	9 00	14	6 46	5 43	9 01
14	Sa	1st boiler insurance issued, 1867	♓	7 00	5 28	10 03	14	6 45	5 44	9 57
Quadragesima Sunday		Day's Length: Northern 10.31; Southern 11.01								
15	Su	Seven years war ended, 1763	♓	6 58	5 29	11 07	14	6 44	5 45	10 54
16	Mo	Kg. Tutankhamen's tomb open.,1923	♈	6 57	5 31	morn	14	6 43	5 46	11 56
17	Tu	John Sullivan born, 1740	♈	6 56	5 33	0 14	14	6 42	5 47	morn
18	We	Madison ratified peace treaty, 1815	♉	6 54	5 34	1 25	14	6 41	5 48	0 59
19	Th	U.S. forces invaded Iwo Jima, 1945	♉	6 53	5 35	2 36	14	6 40	5 49	2 06
20	Fr	Panama Pacific exposition, 1915	♊	6 51	5 37	3 48	14	6 39	5 50	3 13
21	Sa	Fall of Jericho, 1917	♊	6 49	5 38	4 52	14	6 38	5 51	4 17
2nd Sunday in Lent		Day's Length: Northern 10.52; Southern 11.15								
22	Su	Steamer "Rio de Janeiro" wr'kd,1901	♋	6 48	5 40	5 48	14	6 36	5 51	5 16
23	Mo	1st Express N. Y. to Boston, 1839	♋	6 47	5 41	6 35	13	6 35	5 52	6 07
24	Tu	Treaty set.N.W. bound. dispute,1870	♌	6 45	5 42	rises	13	6 34	5 53	rises
25	We	16th Amendment in force, 1913	♌	6 44	5 44	7 01	13	6 33	5 53	7 09
26	Th	1st glass blowing machine pat., 1895	♍	6 42	5 45	8 19	13	6 32	5 54	8 19
27	Fr	General W. B. Franklin born, 1823	♍	6 40	5 46	9 33	13	6 31	5 55	9 26
28	Sa	Mexican peace parley, 1848	♎	6 39	5 47	10 47	13	6 30	5 55	10 32
3rd Sunday in Lent		Day's Length: Northern 11.10; Southern 11.27								
29	Su	Coal miners strike in England, 1912	♎	6 38	5 48	11 58	13	6 29	5 56	11 36

WEATHER FORECAST

Northeast: 1-3, unsettled, cold; 4-7, strong winds; 8-13, continued windy, cold; 14-18, cold period, snow flurries; 19-21, changing to rain; 22-26, warmer, thaws; 27-29, continued warm.

Southeast: 1-5, clear and warm; 6-8, turning colder, high winds; 9-12, continued cold; 13-16, changeable; 17-20, possible rain; 21-25, rise in temperature; 26-29, continued pleasant.

Northwest: 1-4, cold period, unsettled; 5-9, continued cold; 10-14, snow flurries expected; 15-17, windy and cold; 18-21, temperature rise; 22-24, continued pleasant, thaws; 26-29, unsettled.

Southwest: 1-5, high winds; 6-9, warm and dry along southern coast; 10-13, turning colder; 14-17, unsettled, possible showers; 18-20, pleasing, warmer weather; 21-24, warm, turning unsettled; 25-29, changeable.

INCREASED PRODUCTION—Because they agree with the cow and operate in accordance with her milk-making system De Laval Milkers usually result in greater milk yield—often by as much as ten per cent.

SUCCESSFUL WINDBREAKS



FUNCTIONS, PLACEMENT AND PLANTING

Windbreaks are farm assets, if they are properly planned, planted and maintained. The modern farmer considers his windbreaks carefully and shapes them to his particular needs.

FUNCTIONS OF WINDBREAKS

Protection of Crops. Protecting crops from blow-down is perhaps the primary purpose of windbreaks. This is particularly true in plains areas.

Prevention of Wind Erosion. This is an important function, even on the smaller farms. Light soils and fields devoted to special crops will benefit from windbreak protection.

Moderation of Temperature. Reducing wind velocity tends to accumulate heat near the ground with beneficial effects.

Reduction of Evaporation. Under certain conditions, the rate of soil drying is nearly proportionate to wind velocity. Windbreaks help to prevent excessive drying.

Protection of Roads and Buildings. Windbreaks can make houses and barns more comfortable, prevent the drifting of snow in yards, cattle pens and across roads.

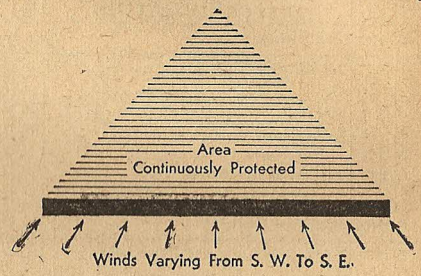
Production of Wood and Fuel. This function of windbreaks is frequently overlooked, yet can be quite profitable. Using windbreaks to produce a yearly crop of salable wood and fuel usually means that the windbreaks receive more attention and care.

PLACEMENT OF WINDBREAKS

Windbreaks should be placed to achieve their principal function. Those protecting fields and crops will be across the path of prevailing summer winds. Those protecting buildings and roads will be planned in consideration of winter winds.

Windbreaks should be as long as possible and as unbroken as possible. The value of a windbreak increases as the square of its length until the latter is at least 24 times the height of the trees. If the trees were three rods high, the area protected would be:

Windbreak length:	*Area protected*
6 rods	9 square rods.
12 rods	36 square rods.
72 rods	1,296 sq. rods, or 8.1 acres.
160 rods	4,464 sq. rods, or 28 acres.



Windbreaks protect triangular areas. Until this triangle reaches out to 12 times the height of the trees, the possibilities of distance protection are not being realized.

Generally, the fence row type of windbreak is adequate for field protection. This consists of one or two rows of trees with some natural underbrush. Making windbreaks too wide uses valuable land, takes moisture and some nitrogen from the soil, shades too much ground. Generally, five percent of the field area can be used for trees without reducing farm yields.

In determining the profitable spacing between windbreak belts, it is well to remember that few crop measurements have shown material benefits beyond 10 times the windbreak height. A spacing of 20 to 25 heights prevents useless overlapping.

PLANTING AND MAINTENANCE

Selection of trees is a matter of locality. The higher trees should be used. A percentage of quick growing trees may be included to bring protection sooner. These may be eliminated later, if desired.

The new trees should be cultivated for several years after planting so that their growth may not be suppressed by weeds and shrubs. Subsequent maintenance will consist largely of removal of deadwood and judicious thinning.

The greatest danger to windbreaks is livestock. Cattle have made many windbreaks open and relatively useless or killed them completely. Cattle should be admitted to windbreaks only for short periods in the middle of hot, dry, days. Hogs and poultry should be excluded entirely.

USEFUL IDEAS



FOR SHOTGUN SHOOTERS

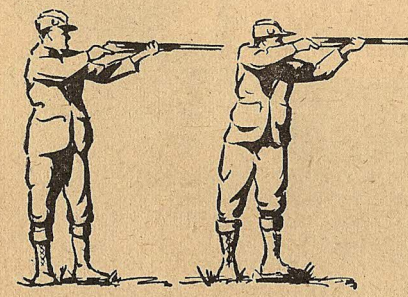
Shotguns are ideal for the small game found in most farm woodlots. So most farm homes have a shotgun or two. Here are some useful ideas on the care and handling of shotguns.

To store your gun for any considerable length of time, coat it inside and out with white vaseline. Even so protected, your gun should be examined frequently, particularly in damp weather. Rust spots will spread rapidly after they start and may cause considerable damage.

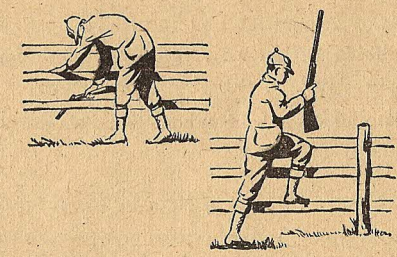
If your shotgun becomes difficult to open or close, there is probably dirt or powder grains under the hold-down bolt. The only answer is thorough cleaning. If, after all the parts are clean, your gun is still hard to open, see a gunsmith.

Even the best of shooters may dent the barrel of his gun accidentally. Dents can be removed by making dent risers, or having a machine shop make them for you. They are hard fiber plugs, the same diameter as the barrel and slightly tapered at one end. This end is pushed up to the dent and the barrel is hammered lightly on the outside with a smooth faced hammer, while the plug is pushed continually. After the dent is removed, the bore is polished with fine abrasive.

Never attempt to adjust trigger pull by filing the sear. Doing so will make your shotgun a dangerous weapon, likely to be discharged on the slightest impact. Take your trigger pull problem to a gunsmith and take his advice.



To mount your shotgun correctly, first bring the barrel level, then seat it firmly in the hollow of your shoulder, not on the upper arm.



Getting your shotgun over a fence is done correctly and safely either by (top) placing the gun, muzzle ahead, through the fence and on the ground, or (bottom) carrying the gun over, muzzle up.



If you are a real shotgun enthusiast, you do not jerk your gun open or slam it shut. You hold the stock between your right elbow and body and operate the top lever with your right thumb. With your left hand you lower or raise the barrels firmly but gently.

It is best to clean shotguns by taking them apart and cleaning the tubes with a bristle brush, or a brass brush if much shooting has been done. Then run a clean rag, dampened with oil or solvent through. Then dry rags until the tubes are bright. Finally a rag soaked in gun oil, or vaseline if the gun is to be stored. Clean the extractors and wipe the outside of the gun with an oil dampened rag. Never clean the gun until it is dry. Dry it thoroughly immediately before use. Always clean any gun from the breech end.

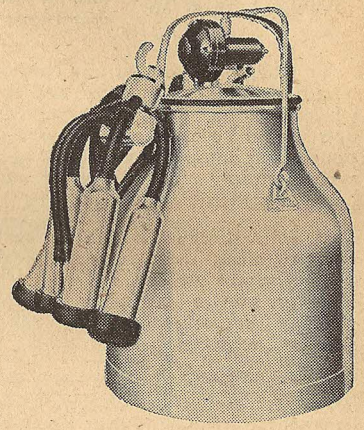
The New De Laval Sterling Milker

Most Advanced Milker of the Pneumatic Pulsator Type.

De Laval Quality at Lower Cost

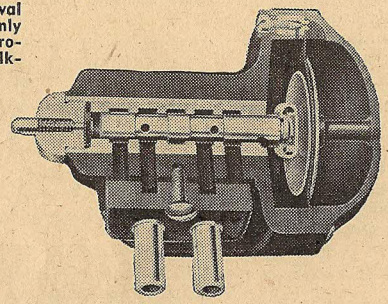
The popular De Laval Sterling Milker—a worthy and somewhat lower priced companion to the great De Laval Magnetic Speedway Milker—has established on thousands of farms an outstanding record for fast, precise milking action . . . simplicity of design and operation . . . clean milk production . . . dependability . . . and typical De Laval high quality.

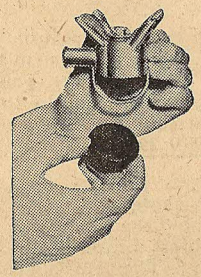
Now . . . the great New De Laval Sterling—in complete milker outfits or as single or double units for use on your present pipe line, is available to provide you with still better De Laval milking at lower cost.



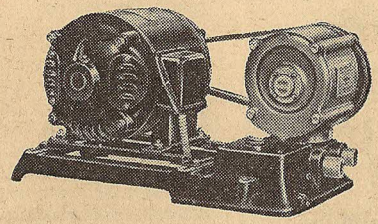
De Laval quality milking at lowest cost — the great De Laval Sterling Milker unit.

The famous De Laval Sterling Pulsator has only two moving parts and provides precise, pleasing milking action.

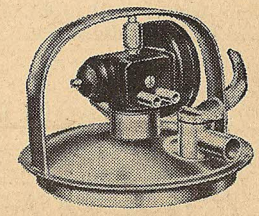




The De Laval Sterling "Sani-Claw" has to be clean because you can see straight through it. Removable rubber cap facilitates quick, easy washing.



The new De Laval Sterling Pump is a streamlined unit—retaining the tried and proved principles of the De Laval low speed rotary pump but with automatic metered lubrication and higher vacuum capacity as added features.



The new all-stainless steel De Laval Sterling "Sani-Cover" provides easiest handling and most thorough sanitation.

MARCH, 1948

Thirty-one Days • Third Month

MOON'S PHASES, E. S. T.

☾ L. Quar., 2nd, 11:35 A.M.
● N. Moon, 10th, 4:15 P.M.
☽ F. Quar., 18th, 7:27 A.M.
○ F. Moon, 24th, 10:10 P.M.

Days of Month	Days of Week	HISTORICAL EVENTS	Moon's Place	LATITUDE of Northern States: Sun rises H. M.	Sun sets H. M.	Moon rises H. M.	Sun Slow	LATITUDE of Southern States: Sun rises H. M.	Sun sets H. M.	Moon rises H. M.
1	Mo	1st Agricultural Society founded,1785	♎	6 37	5 49	morn	12	6 28	5 57	morn
2	Tu	Pope Leo XIII born, 1810	♏	6 36	5 50	1 08	12	6 27	5 58	0 39
3	We	War with Algiers, 1815	♏	6 34	5 51	2 14	12	6 26	5 59	1 40
4	Th	Department of Labor created, 1913	♐	6 33	5 53	3 13	12	6 25	6 00	2 37
5	Fr	Zeppelins raided English coast, 1916	♐	6 31	5 54	4 06	12	6 24	6 00	3 30
6	Sa	Social Democratic Party organ., 1900	♑	6 29	5 55	4 50	11	6 23	6 01	4 18
4th Sunday in Lent		Day's Length: Northern 11.29; Southern 11.40								
7	Su	Holland in League of Nations, 1920	♑	6 27	5 56	5 26	11	6 22	6 02	4 57
8	Mo	1st Army crossed Rhine, 1945	♑	6 25	5 57	5 57	11	6 20	6 02	5 32
9	Tu	Wilson called extra session, 1917	♒	6 24	5 59	6 22	11	6 19	6 03	6 04
10	We	Boston plundered by British, 1776	♒	6 22	6 00	sets	10	6 18	6 04	sets
11	Th	SS. "President" disappeared, 1841	♓	6 21	6 01	6 52	10	6 17	6 04	7 05
12	Fr	Girl Scouts organized, 1912	♓	6 19	6 02	7 56	10	6 16	6 05	7 52
13	Sa	Tornado in south, 1922	♓	6 17	6 03	9 00	10	6 14	6 06	8 50
5th Sunday in Lent		Day's Length: Northern 11.49; Southern 11.54								
14	Su	Amer. forces arrive in Australia,1942	♈	6 15	6 04	10 07	9	6 13	6 07	9 50
15	Mo	Czar Nicholas abdicated, 1917	♈	6 13	6 05	11 16	9	6 11	6 08	10 53
16	Tu	James Madison, president, born, 1751	♉	6 12	6 07	morn	9	6 10	6 08	11 57
17	We	British evacuated Boston, 1776	♉	6 10	6 08	0 27	8	6 09	6 09	morn
18	Th	Salmon Falls destroyed, 1690	♊	6 09	6 09	1 38	8	6 08	6 10	1 04
19	Fr	Yale College opened, 1701	♊	6 07	6 10	2 44	8	6 06	6 10	2 07
20	Sa	German drive began, 1918	♋	6 05	6 11	3 41	8	6 05	6 11	3 06
Palm Sunday		Day's Length: Northern 12.08; Southern 12.08								
21	Su	George Fuller died, 1884	♋	6 04	6 12	4 29	7	6 04	6 12	3 58
22	Mo	Czar of Russia jailed, 1917	♌	6 02	6 13	5 06	7	6 02	6 12	4 43
23	Tu	Russian victory at Jacobstadt, 1916	♌	6 00	6 14	5 38	7	6 01	6 13	5 23
24	We	Crowns of Eng. & Scot. joined, 1603	♌	5 59	6 15	rises	6	6 00	6 14	rises
25	Th	1st water power canal began, 1639	♍	5 57	6 16	7 06	6	5 58	6 15	7 04
26	Fr	Sarah Bernhardt died, 1923	♍	5 55	6 18	8 22	6	5 57	6 16	8 10
27	Sa	Gunpowder 1st used in Europe, 1380	♎	5 53	6 19	9 36	5	5 55	6 17	9 17
Easter Sunday		Day's Length: Northern 12.29; Southern 12.24								
28	Su	Canada ceded to France, 1632	♎	5 51	6 20	10 49	5	5 53	6 17	10 24
29	Mo	Capt. Scott died at South Pole, 1912	♏	5 49	6 21	11 59	5	5 52	6 18	11 28
30	Tu	Ether first used, 1842	♏	5 47	6 22	morn	4	5 51	6 18	morn
31	We	Allies captured Paris, 1814	♐	5 46	6 23	1 03	4	5 50	6 19	0 29

WEATHER FORECAST

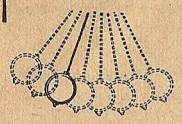
Northeast: 1-3, unpleasant, cold; 4-7, increasing winds, continued cold; 8-12, warmer, clearing; 13-17, unsettled; 18-21, drop in temperature, rain; 22-26, continued cold, unpleasant; 27-31, seasonal weather.

Southeast: 1-5, pleasant, high winds; 6-9, temperature rise, rainy; 10-13, rainy season; 14-18, cloudy, dull; 19-22, clearing, fair; 23-27, local rain storm; 28-31, turning pleasant.

Northwest: 1-4, high winds, rain; 5-8, temperature drop; 9-14, generally unfavorable; 15-19, considerably warmer; 20-23, continued warm; 24-28, damp, unsettled; 29-31, clearing, pleasant.

Southwest: 1-3, local showers; 4-8, mild winds, damp; 9-13, seasonal weather; 14-17,warmer,cloudy; 18-21, clearing generally; 22-25, low winds, possible rains; 26-31, warmer, windy along southern coast.

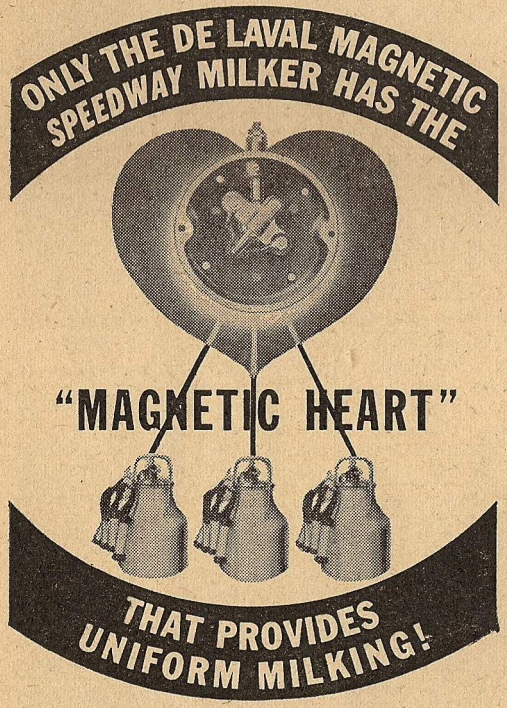
HEALTHIER UDDERS—De Laval Milkers are kind and gentle to the cow's udder. They place no undue pull on its delicate tissues, cause no distortion and create no strain on its attachment ligaments.



UNIFORM MILKING

MEANS MORE MILK

The new De Laval Magnetic Speedway Milker is the only "Magnetic" Milker—the only milker that assures uniform milking for more milk day after day always.



The Master Control at the Pulso-Pump is the "heart" of the De Laval Magnetic Speedway Milker. It times and controls pulsations for all units in operation. Variations or changes in milking speed and action cannot occur. No other milker has this all-important feature.

The milking action of the new De Laval Magnetic Speedway Milker is exactly the same as the many thousands of De Laval Magnetic Milker outfits that have preceded it and which are in daily use in every part of the country. Results . . . in terms of better, faster, cleaner milking have proved their milking superiority over a period of many years.

"Magnetic" milking means *uniform* milking with all cows being milked in exactly the same way at every milking. As every dairyman knows, *uniform* milking . . . milking that does not vary in speed or action . . . results in maintaining the highest level of milk production.

Milking that varies in speed and action from one milking to another—whether it is hand or machine milking—causes a loss in milk production. Every cow owner has experienced this when changing hand milkers. The cows become accustomed to a certain milking speed and action. When this is changed, whether due to a change in hand milkers or use of a milking machine unit of a type which can vary in speed and action, a production loss will result.

In the new De Laval Magnetic Speedway Milker the pulsations of every unit in operation are magnetically controlled by the Master Control at the Pulso-Pump. Hence every unit milks exactly the same at every milking and the cow is milked with the same uniform milking speed and action, regardless of which milker unit is used. This is an exclusive De Laval Magnetic Speedway feature. No other method of milking can give your cows milking that is *absolutely uniform and regular.*



TRAINING DOGS

FOR GOOD BEHAVIOR

Every dog should be, and can be, trained to answer simple commands and do easy tricks and "chores". A well mannered dog is a source of pride to its owner. Here are some practical pointers on dog training methods.

1. Training should begin in puppyhood. Remember that your puppy is like a child. He wants to play most of the time. Don't expect too much from him.

2. Training should be done only by the puppy's master. Many masters only confuse him.

3. Your puppy is not a plaything for children. He will enjoy short play periods with children but continued handling will make him tired and irritable.

4. Always give a command in an even tone of voice and always same words.

5. Reward obedience with kind words or fondling. Your dog's greatest delight is to please you.

6. Punish disobedience with words of disapproval or gentle slaps. Never whip your dog with his leash or the leash will lose its value in training.

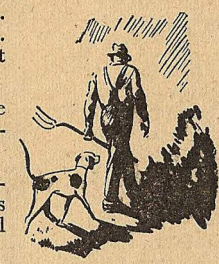
7. Do not train your puppy for more than a few minutes at a time. If you train for such long periods that the dog gets sulky, he will regard training as a punishment.

8. Begin training your puppy with simple commands which he will enjoy.

TO FETCH. All dogs love to chase objects and bring them to their masters. Begin with a rubber ball. Roll it for the puppy. When he gets it, take it away gently and roll it again. He will soon get the idea that you will play with him if he brings the ball to you. Then begin commanding, "Fetch it, Spot." Soon you can substitute a rolled paper or a stick.

TO COME. To train your pup to come when called, attach a string or leash to his collar. Say, "Here, Spot" and pull gently on the string. When he gets the idea and comes without pulling, praise him. Soon he will come without the leash.

TO HEEL. A dog which will walk to heel is well trained. Begin by walking with him on a leash. Then shorten the leash so that he cannot walk too far back



and prevent running forward with a stick or a cane. At the same time command him to "Heel, Spot." Reward him when he behaves well and then try it without the leash. After he has learned to heel, do not make him do it unless it is necessary.

TO LIE DOWN. Pull out your puppy's forepaws gently, at the same time pressing his hind quarters down and commanding, "Lie down, Spot." When he understands what is required, praise him.

EASY TRICKS. Do not try to teach your dogs tricks too soon. Teach him obedience and good manners thoroughly first. Then he will learn tricks quickly.

He will learn to be a "Dead dog" if you roll him over and repeat the command over and over again, pushing him back gently when he tries to move. Before he becomes tired or irritated, say "Here, Spot", and let him get up.

Teach your pup to sit up in much the same way. Hold him in a sitting position against your legs and say, "Sit up, Spot". After awhile try removing your hands. If he falls over, hold him up again. Reward him when he begins to get the idea.

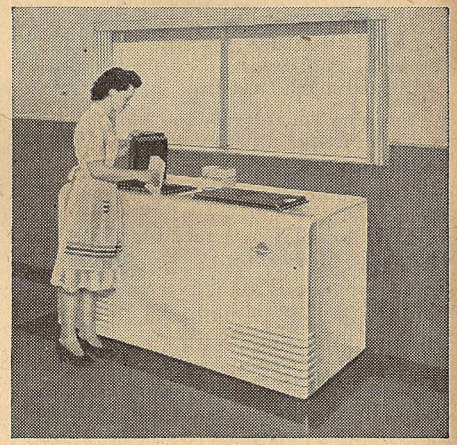
To teach your pup to jump, first coax him over a flat board a few inches high. If you begin with a stick he may try to crawl under it. After he learns to go over the board at a command, raise it a few inches. When he masters this, substitute a narrower board and finally a stick.



DE LAVAL SPEEDWAY FOOD FREEZERS

BETTER, EASIER FOOD PRESERVATION AT LOWER COST

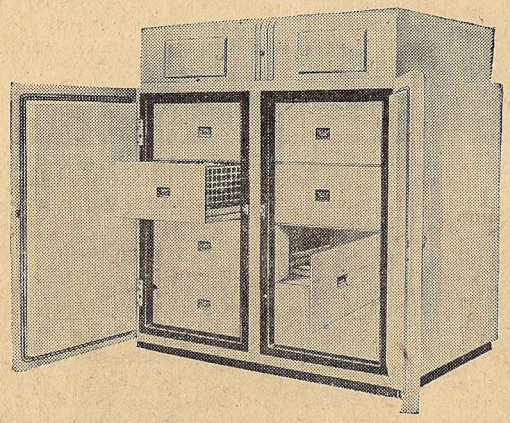
Model F-100



Beautiful horizontal 16½ cu. ft. chest-type cabinet with top-opening doors for minimum loss of cold. Most efficient design for this size Freezer. Freezing compartment, 3 cu. ft.; storage space, 13½ cu. ft. (up to 650 lbs. of assorted frozen food.) Hermetically sealed type compressor unit; 1/3 hp. motor. Four inches of insulation in bottom and sides—top 3 in. Interior is beautiful rust-proof aluminum bonded to cooling coils. Exterior heavy bonderized steel with gleaming baked white enamel finish. Dimensions: Length, 71 in.; width, 29 in.; height, 36 in.

The two great new De Laval Speedway Food Freezers shown give the farm family the means of enjoying more varied foods, without regard for season, at lower cost and with less work. They make possible real savings in the family food bill—better eating at lower cost. More food can be home produced and the farm kitchen garden becomes a year-round proposition.

De Laval Speedway Food Freezers offer the utmost in efficient, low-cost operation, dependability and beautiful appearance. As many people have said, the De Laval Speedway Food Freezer line is "A great old name on a great new product."



De Laval Speedway Food Freezer Model F-200 brings you the De Laval "Inner-Sealed" principle. Two double sealed outer doors provide access to the "Inner-Sealed" freezing and storage compartments — roller mounted locker drawers on the left side, compartments with locker doors on right side.

Gross capacity, 35 cu. ft.; product capacity, 33 cu. ft. (up to 1350 lbs. of assorted frozen foods). Freezing compartment, 8½ cu. ft.; storage compartments, 24½ cu. ft. Two-cylinder open-type compressor, ½ hp. motor. Four inches of high efficiency insulation throughout. Dimensions: Width, 60½ in.; depth, 34½ in. (29 in. with doors removed); height, 71¼ in.

APRIL, 1948

Thirty Days • Fourth Month

Days of Month	Days of Week	MOON'S PHASES, E. S. T. / HISTORICAL EVENTS	Moon's Place	LATITUDE of Northern States: Sun rises H. M.	Sun sets H. M.	Moon rises H. M.	Sun Slow	LATITUDE of Southern States: Sun rises H. M.	Sun sets H. M.	Moon rises H. M.
		☾ L. Quar., 1st, 5:25 A.M. ● N. Moon, 9th, 8:16 A.M. ☽ F. Quar., 16th, 2:42 P.M. ○ F. Moon, 23rd, 8:28 A.M. ☾ L. Quar., 30th, 11:47 P.M.								
1	Th	Americans landed on Okinawa, 1945	♐	5 44	6 24	2 00	4	5 49	6 20	1 24
2	Fr	Hans Christian Anderson born, 1805	♐	5 43	6 26	2 48	4	5 48	6 21	2 13
3	Sa	U.S. recognized Chinese Repub., 1913	♑	5 41	6 27	3 28	3	5 46	6 21	2 56
Low Sunday		Day's Length: Northern 12.49; Southern 12.37								
4	Su	Senate passed war resolution, 1917	♑	5 39	6 28	4 00	3	5 45	6 22	3 33
5	Mo	British landed at Vladivostok, 1918	♒	5 37	6 29	4 27	3	5 44	6 23	4 06
6	Tu	Peary discovered North Pole, 1909	♒	5 36	6 30	4 49	2	5 43	6 23	4 35
7	We	Tried to assassinate Mussolini, 1926	♒	5 34	6 31	5 10	2	5 42	6 24	5 02
8	Th	Austria declared war on U. S., 1917	♓	5 32	6 32	5 29	2	5 40	6 24	5 28
9	Fr	Japs captured Bataan, 1942	♓	5 31	6 33	sets	2	5 39	6 25	sets
10	Sa	Webb Act passed, 1918	♈	5 29	6 34	7 57	1	5 38	6 26	7 42
2nd Sunday after Easter		Day's Length: Northern 13.08; Southern 12.50								
11	Su	Ger. asks arms exports stopped, 1915	♈	5 27	6 35	9 07	1	5 36	6 26	8 46
12	Mo	Battle of Lexington, Mo., 1864	♈	5 26	6 37	10 19	1	5 35	6 27	9 50
13	Tu	Fatal riots in India, 1919	♉	5 24	6 38	11 30	1	5 34	6 28	10 56
14	We	Abraham Lincoln shot, 1865	♉	5 23	6 39	morn	0	5 33	6 28	morn
15	Th	1st R.R. reached Mississippi, 1857	♊	5 22	6 41	0 38	F	5 32	6 29	0 02
16	Fr	Town of Tonawanda formed, 1836	♊	5 20	6 42	1 37	0	5 31	6 30	1 02
17	Sa	Battle of Fort Wessels, 1864	♋	5 18	6 43	2 27	0	5 30	6 31	1 55
3rd Sunday after Easter		Day's Length: Northern 13.28; Southern 13.03								
18	Su	Tokyo bomb. by Doolittle fliers, 1942	♋	5 16	6 44	3 06	1	5 28	6 31	2 41
19	Mo	U. S. recognized by Holland, 1782	♌	5 14	6 45	3 39	1	5 27	6 32	3 20
20	Tu	Germans raid Scicheprey, 1918	♌	5 12	6 46	4 06	1	5 26	6 33	3 55
21	We	Russians entered Berlin, 1945	♍	5 11	6 47	4 31	1	5 25	6 33	4 27
22	Th	1st white woman arrived in Ore., 1814	♍	5 10	6 48	4 55	2	5 24	6 34	4 57
23	Fr	Shakespeare died, 1616	♎	5 08	6 50	rises	2	5 23	6 35	rises
24	Sa	Arkansas flood, 1927	♎	5 06	6 51	8 26	2	5 22	6 36	8 03
4th Sunday after Easter		Day's Length: Northern 13.47; Southern 13.15								
25	Su	Jamestown Exposition, 1907	♎	5 05	6 52	9 39	2	5 21	6 36	9 09
26	Mo	1st Amer. division in action, 1918	♏	5 04	6 54	10 47	2	5 20	6 37	10 13
27	Tu	Battle of York, 1813	♏	5 02	6 55	11 49	2	5 19	6 38	11 13
28	We	Italians executed Mussolini, 1945	♐	5 00	6 56	morn	3	5 18	6 39	morn
29	Th	Seventh Army entered Munich, 1945	♐	4 59	6 57	0 42	3	5 16	6 39	0 05
30	Fr	Philippine war ended, 1902	♑	4 57	6 58	1 25	3	5 15	6 40	0 52

WEATHER FORECAST

Northeast: 1-5, blustery period; 6-10, continued cold and windy; 11-14, possible showers; 15-19, rain, typical spring weather; 20-24, clearing, generally fair; 25-27, continued warm; 28-30, light showers.

Southeast: 1-3, local showers; 4-8, increasing winds, cold; 9-12, rainy period, damp; 13-18, turning more pleasant; 19-22, slight rise in temperature; 23-26, variable; 27-30, windy, unsettled.

Northwest: 1-5, increasing winds; 6-9, sudden drop in temperature; 10-13, possible local frosts; 14-18, turning warmer, cloudy; 19-23, continued warm, possible showers; 24-26, clearing, more pleasant; 27-30, cooler, showers.

Southwest: 1-4, unpleasant weather; 5-8, showers, colder; 9-13, more pleasant, cool; 14-17, high winds, cloudy; 18-22, rainy season; 23-25, damp, turning pleasant; 26-30, cloudy, possible showers.

CLEANER MILK—De Laval Milkers afford complete sanitary control and are designed and built for quickest, easiest, most thorough cleaning. Result—milk of lowest bacteria count is consistently produced.



DRY FARM CELLARS

BY GOOD REPAIR METHODS

Leaky, damp or frequently flooded cellars are the results of improper planning or poor construction. Making them dry is a matter of finding and correcting these errors. Here are the most common faults and their remedies.

IMPROPER DRAINAGE

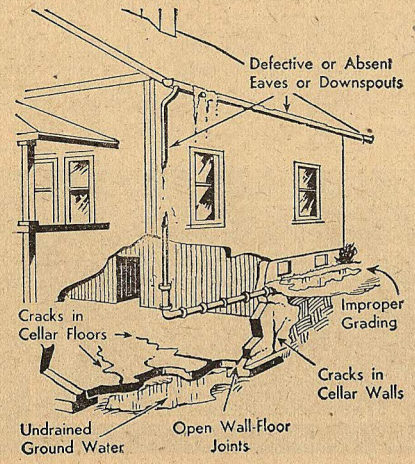
This may begin with clogged or broken eaves troughs and down spouts, or absence of them, causing surface pools near cellar walls. Ground which is flat or slopes toward cellar walls way also cause surface pools. Repairing or adding eaves troughs and grading ground to slope away from cellar walls will correct these causes of wet cellars.

Ground water too near or above the cellar bottom may cause cellars to be extremely damp or even have continual standing water. The simplest solution is tile drains to a lower level. If this is not possible, cellar drainers or sump pumps can lift the water from the cellar.

CONSTRUCTION FAULTS

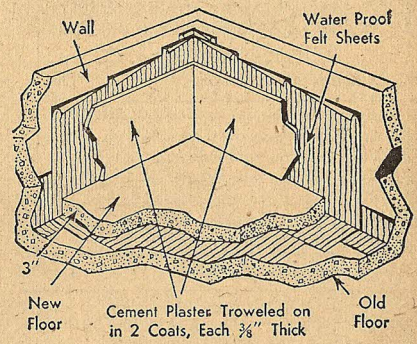
Local leaks in cellars may result from cracks in walls or floors, opened joints between floor and walls or between concrete blocks, stone or brick in masonry walls. Wall or floor cracks may be filled with cement mortar after opening with a cold chisel. Wall-floor joints may be filled with hot tar or cement—water paste.

Badly cracked walls should be repaired from the outside, if possible. A work trench is dug to the bottom of the wall. All cracks are filled with cement mortar, the wall cleaned with a hose, dried and painted with at least two coats of hot tar.



WATERPROOFING

Cellars having damp walls may be improved by painting with grout (white cement and water mixed to the consistency of cream) or with one of the prepared paints available for this purpose. Mop coating with hot tar is also good. Much better is prepared plastic cement, applied as a plaster about ⅛" to ¼" thick. Several excellent cements for this purpose are available.



Membrane waterproofing is by far the most effective. It also involves more materials and labor. However, in cases of very wet cellars, it may be the only way.

Membrane waterproofing consists of a skin or membrane of tar impregnated felt, burlap or tar paper enclosing the entire cellar. The impregnated sheets are bonded to walls and floor with hot asphalt or coal tar pitch. Sheets are overlapped and at least two layers are used. The walls are then plastered with cement mortar, ¾" to 1" thick, preferably in two coats. A new concrete floor about 3" thick is laid over the floor membrane. Care must be taken that the impregnated sheets are not broken during application.



HAY MAKING

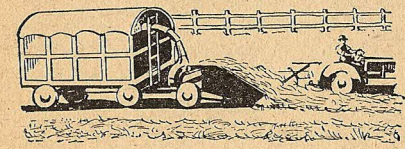
BY MODERN METHODS

Hay making is entering a new era. Harvesting hay with the field chopper and the mow drying of hay are now more widely used. Separately these methods offer many advantages. Together they promise better hay at lower cost.

THE FIELD CHOPPER

The field chopper, or forage harvester, although relatively new, is so efficient that its use is spreading rapidly. This trend will increase, now that more machines can be produced.

After the hay has been cut and raked with the side rake, the field chopper picks it up, chops and delivers it into the wagon. It is usually set for a long cut, about two inches. Rate of chopping is usually well over three tons per hour. A blower transfers the hay from wagon to mow. Most field choppers will also handle grass silage, corn silage and straw by means of attachments or conversion units.



MOW DRYING

Mow drying is perhaps more widely used than the field chopper since the installation can be constructed with farm labor and the materials required have been easily obtained.

Both center tunnel and side tunnel types are in use. The side tunnel type is gaining favor because the tunnel occupies less important mow space and the floor ducts can be telescoped to provide usable floor area when not in use. The center tunnel type, however, requires less material to construct. Either type must have a motor and fan which will supply not less than 10 cubic feet of air per minute for each square foot of floor area.

LABOR SAVING

The field chopper will harvest hay, from windrow to mow, at a little more than one man hour of labor per ton. The field baler requires more than twice as many man hours, the hay loader and mow fork take over three man hours per ton, on the average.

In the mow, chopped hay requires only 60% of the space of loose hay. It is easier to handle in feeding. Care must be taken not to overload the mow or to reinforce it if necessary.

Mow drying provides a cooler, dust-free atmosphere that permits men to work more actively and comfortably.

BETTER QUALITY

The new hay making methods assure better quality hay. That means better beef and higher milk production, as well as less waste in feeding.

Mow drying uses hay having 30 to 45 percent moisture content. It eliminates the losses of Vitamin A and other nutrients which occur in field curing. And it removes the possibilities of spoilage by rain or heavy dew. By using the field chopper, the hay can be in the barn four hours after mowing.

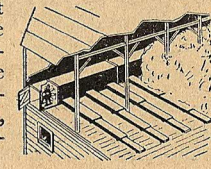
Field chopper and mow drying save a large percentage of the leaves lost by older haying methods. Leaves do not tend to drop from the moisten hay and the rapid handling helps to prevent loss.

Leaves are the most nutritive parts of the plant, containing 70% of the protein and 90% of the Vitamin A. Hay graders have stated that the saving in leaves pays the operating costs of the new haying.

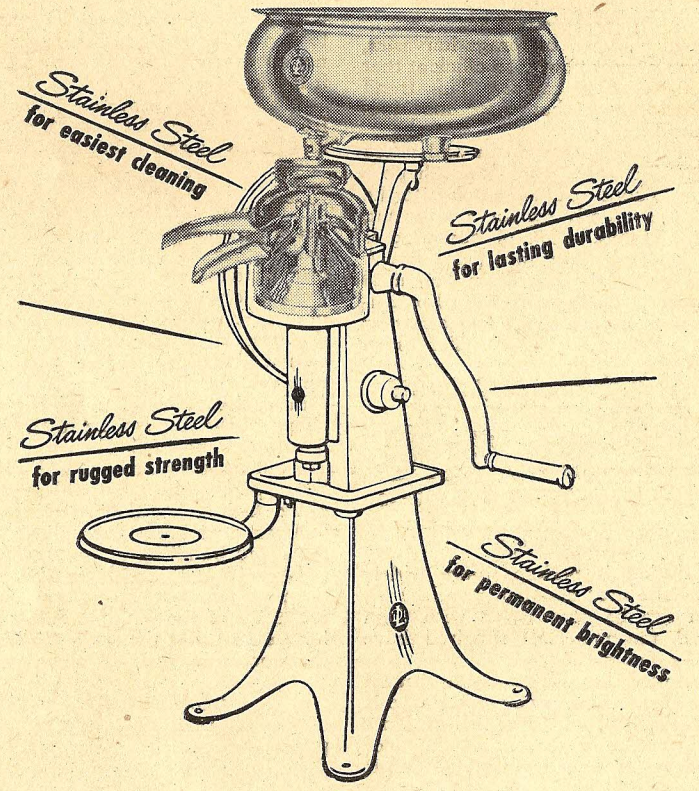
CONCERNING COSTS

The field chopper probably will cost little more than the equipment it eliminates. With proper accessories, it replaces the hay loader and fork equipment, silage cutter and corn binder.

The mow drying installation can be built of inexpensive plywood or light lumber and its cost will depend on local conditions. The motor and fan will be the major investment. The motor can be mounted on rails or otherwise arranged so that it can be put to use elsewhere after the haying season. The complete installation, if properly constructed, should last a lifetime.



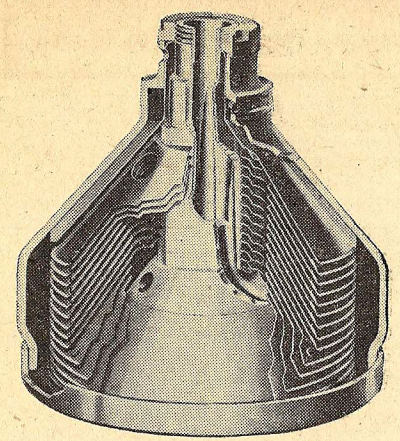
NEW DE LAVAL WORLD'S STANDARD SERIES CREAM SEPARATORS



In the new De Laval World's Standard Series Separators every part that is touched by the milk and cream is made of tough, permanently bright and rust-proof stainless steel. Supply can, bowl and covers with new, open discharge type spouts —all are of gleaming, highly polished stainless steel which is the "friendliest" of all metals to milk and easiest to wash and keep clean. De Laval is noted for its especially high quality manufacture of stainless steel parts and you will find the stainless steel parts of the new De Laval World's Standard Series Separators to be beautiful examples of this outstanding skill.

NEW SUPER-SKIMMING BOWL

The new World's Standard Series stainless steel, Super-Skimming Bowl has been further refined in design and construction. It is the cleanest skimming device available to the farm producer of

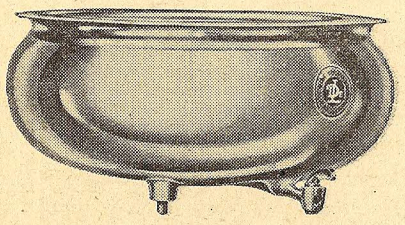


Stainless steel, streamlined Super-Skimming Bowl —cleanest skimming, easiest cleaning.

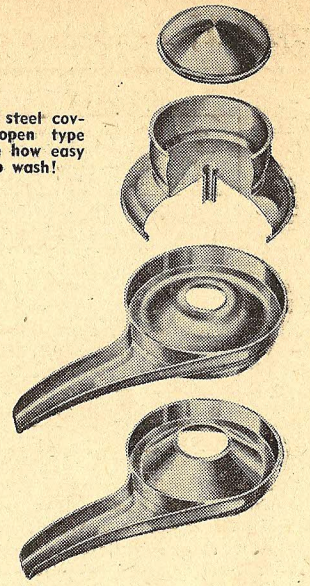
butterfat . . . not only the first time you use it but throughout many long, profitable years. It produces cream of the highest quality and separates more milk in less time with less effort.

MECHANICALLY REFINED AND IMPROVED

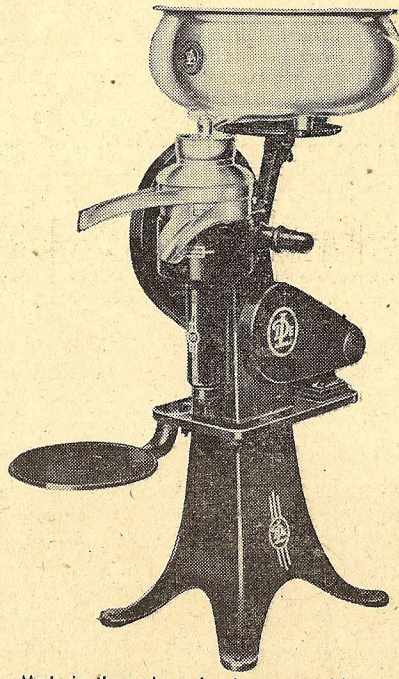
The driving mechanism has been refined and improved for easiest operation and longest service. All ball bearings are of the fully enclosed and protected type to exclude any foreign matter. Gears are cut from special, long-wearing metals to highest precision standards. Lubrication is fully automatic and a new type plastic indicator shows oil level and condition at a glance.



Stainless steel, seamless, anti-splash supply can with visible flow "quick-clean" faucet.



Stainless steel covers with open type spouts—see how easy they are to wash!



Made in three sizes—hand or motor drive:
No. 514— 550 lbs. per hour
No. 518— 800 lbs. per hour
No. 519—1150 lbs. per hour

MAY, 1948

Thirty-one Days • Fifth Month

MOON'S PHASES, E. S. T.

- N. Moon, 8th, 9:30 P.M.
- F. Quar., 15th, 7:55 P.M.
- F. Moon, 22nd, 7:37 P.M.
- L. Quar., 30th, 5:43 P.M.

Days of Month	Days of Week	HISTORICAL EVENTS	Moon's Place	LATITUDE of Northern States: Sun rises	Sun sets	Moon rises	Sun Fast	LATITUDE of Southern States: Sun rises	Sun sets	Moon rises
				H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.
1	Sa	Empire State Bldg. dedicated, 1931	♉	4 56	6 59	2 01	3	5 14	6 41	1 31
Rogation Sunday		Day's Length: Northern 14.06; Southern 13.29								
2	Su	Ger. forces in Italy surrendered, 1945	♊	4 55	7 01	2 30	3	5 13	6 42	2 06
3	Mo	Columbus discovered Jamaica, 1494	♊	4 53	7 02	2 53	3	5 12	6 42	2 36
4	Tu	Block Island annexed to R. I., 1636	♊	4 52	7 03	3 14	3	5 11	6 43	3 03
5	We	Albermarle naval battle, 1864	♋	4 51	7 04	3 34	3	5 10	6 44	3 29
6	Th	Paris World's Fair began, 1889	♋	4 49	7 05	3 54	3	5 09	6 45	3 55
7	Fr	Lusitania sank, 1915	♋	4 48	7 06	4 14	4	5 08	6 45	4 22
8	Sa	Liberia broke with Germany, 1917	♈	4 47	7 07	sets	4	5 07	6 46	sets
Sunday after Ascension		Day's Length: Northern 14.22; Southern 13.41								
9	Su	Byrd flew over North Pole, 1926	♈	4 46	7 08	8 05	4	5 06	6 47	7 38
10	Mo	Stonewall Jackson died, 1863	♉	4 45	7 09	9 19	4	5 06	6 48	8 45
11	Tu	1st Dutch immigrants ar. N.Y., 1610	♉	4 44	7 10	10 29	4	5 05	6 48	9 52
12	We	Peace Confer. at Washington, 1913	♊	4 43	7 11	11 32	4	5 04	6 49	10 55
13	Th	U.S. received Boxer indemnity, 1908	♊	4 41	7 12	morn	4	5 03	6 50	11 52
14	Fr	Dutch surrendered to Germans, 1940	♋	4 40	7 13	0 26	4	5 03	6 50	morn
15	Sa	Japanese premier assassinated, 1932	♋	4 39	7 14	1 08	4	5 02	6 51	0 40
Pentecost—Whit Sunday		Day's Length: Northern 14.37; Southern 13.51								
16	Su	Elizabeth Palmer Peabody b., 1804	♌	4 38	7 15	1 42	4	5 01	6 52	1 21
17	Mo	Norway adopted constitution, 1814	♌	4 37	7 16	2 11	4	5 00	6 52	1 56
18	Tu	Chem. plant exploded in Pittsb'h, 1918	♍	4 36	7 18	2 35	4	5 00	6 53	2 29
19	We	Battle of Vicksburg began, 1863	♍	4 35	7 19	2 58	4	4 59	6 54	2 58
20	Th	Columbus died, 1506	♍	4 34	7 20	3 21	4	4 59	6 55	3 28
21	Fr	Lindbergh reached Paris, 1927	♎	4 33	7 21	3 45	4	4 58	6 55	3 59
22	Sa	1st marriage in New England, 1621	♎	4 32	7 22	rises	4	4 57	6 56	rises
Trinity Sunday		Day's Length: Northern 14.52; Southern 14.00								
23	Su	Italy declared war on U. S., 1915	♏	4 31	7 23	8 29	3	4 57	6 57	7 56
24	Mo	Queen Victoria born, 1819	♏	4 31	7 24	9 33	3	4 56	6 57	8 58
25	Tu	Irish Home Rule Bill passed, 1914	♐	4 30	7 25	10 30	3	4 56	6 58	9 54
26	We	Fly shuttle for looms patented, 1733	♐	4 29	7 26	11 20	3	4 55	6 58	10 45
27	Th	Ger. renewed Aisne offensive, 1918	♑	4 29	7 27	11 59	3	4 55	6 59	11 28
28	Fr	Venice bombarded by Austrians, 1915	♑	4 28	7 27	morn	3	4 54	7 00	morn
29	Sa	Winslow Expedition left Boston, 1755	♑	4 27	7 28	0 30	3	4 54	7 00	0 04
1st Sunday after Trinity		Day's Length: Northern 15.03; Southern 14.07								
30	Su	De Soto landed in Florida, 1539	♒	4 26	7 29	0 55	3	4 54	7 01	0 36
31	Mo	Battle at Fair Oaks, 1862	♒	4 26	7 29	1 17	2	4 54	7 01	1 04

WEATHER FORECAST

Northeast: 1-4, light rain; 5-9, muggy, damp; 10-14, rise in temperature; 15-18, pleasant period; 19-23, threatening, unpleasant; 24-26, cloudy, cooler; 27-31, showers expected.

Southeast: 1-3, changeable, dull; 4-8, very pleasant; 9-12, unsettled and cool; 13-17, warmer and fair; 18-22, continued warm, showers; 23-27, slight drop in temperature; 28-31, unpleasant.

Northwest: 1-4, cool nights; 5-8, increasing winds, possible showers; 9-13, rainy period, cool; 14-19, clearing, continued cool; 20-24, warmer, fair; 25-27, turning unpleasant; 28-31, generally stormy.

Southwest: 1-5, cloudy, some wind; 6-9, unsettled; 10-13, local showers probable; 14-17, turning pleasant, warm; 18-21, seasonal weather; 22-25, thunder storm; 26-31, clearing, quite pleasant.

TIME SAVING—De Laval Milkers save at least half the time required to milk by hand—and frequently much more. They will quickly pay for themselves in time savings alone. This is an important economy.

HIGH IN QUALITY—LOW IN COST

DE LAVAL JUNIOR SERIES SEPARATORS FILL GREAT NEED

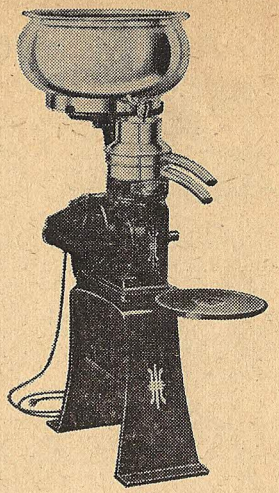
The Junior Series, consisting of four machines ranging in separating capacities from 225 to 500 pounds per hour, are splendid separators for users with but a small herd, or for those to whom low price is a limiting consideration in the purchase of a cream separator.

These machines are the lowest priced separators sold by the De Laval Company and are built to the highest standards in every respect. Thus the purchaser of a Junior gets a quality machine at the lowest price level, and therefore obtains greater value than ever before.

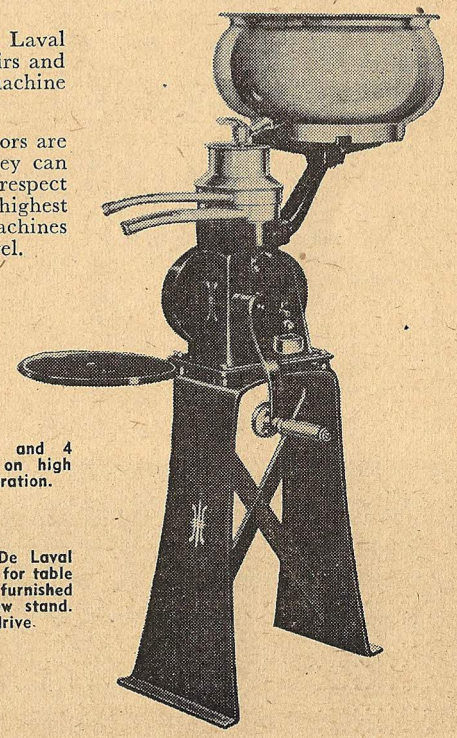
There is no reason why any cream producer should use a cheap, inferior separator, skim by hand or use a wasteful water separator because he feels he cannot afford a standard De Laval, no matter how great he may think its superiority. There is a De Laval for everyone.

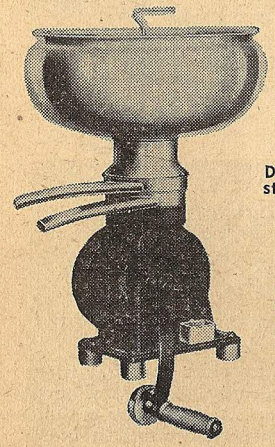
Furthermore, the purchaser of a De Laval may be sure that he can always get repairs and prompt service, no matter how old his machine may be.

De Laval Junior Series Cream Separators are the best low-priced separators that money can buy. They are quality products in every respect with materials and workmanship of the highest standard, and far superior to any other machines sold at anywhere near the same price level.



Nos. 3 and 4 De Laval Junior equipped with motor drive and low stand.





Right: Nos. 3 and 4 De Laval Junior on high stand for hand operation.

Left: No. 2 De Laval Junior Separator for table use, or can be furnished with high or low stand. Hand or motor drive.

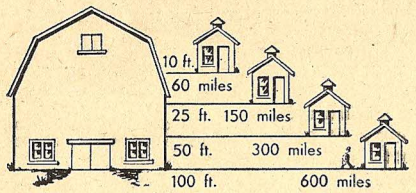
MILK HOUSE CONSTRUCTION



DATA AND SUGGESTIONS

The milk house is a vital building on any dairy farm. Proper location and well planned arrangement will have much time. Here is some data which will be useful in building a new milk house or redesigning an old one.

The strongest reason for attaching the milk house to the barn is to save walking time. For each 3½ feet the milk house is from the barn, there is one mile of travel a year to care for each cow. The diagram below shows the total yearly travel for a 20-cow dairy farm.



Minimum Recommended Sizes for Milk Houses Attached to Barn

Cans of milk per day Number	*Size Feet*	*Sq. ft. per can*
2	8x8	32
4	8x10	20
6	10x10	17
8	10x12	15
10	12x12	14
12	12x12	12
16	12x14	11

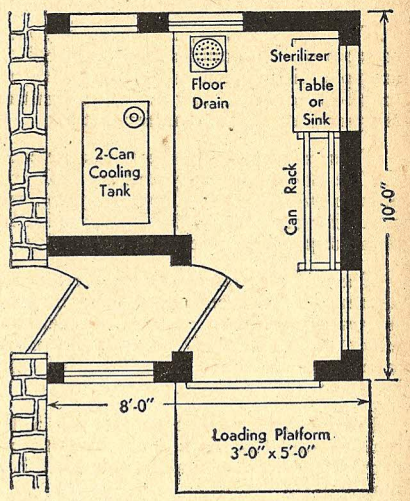
Milk Houses Separate from Barn

Cans of milk per day Number	*Size Feet*	*Sq. ft. per can*
2	6x8	24
4	8x10	20
6	10x10	17
8	10x10	13
10	10x12	12
12	10x12	10
16	12x12	9

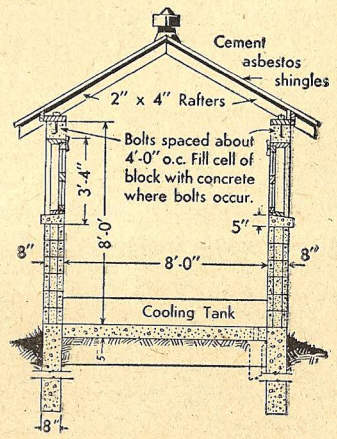
Sizes of Milk Cooling Tanks

These outside dimensions allow three cans of water for each can being cooled.

Capacity Number of cans	*Concrete, uninsulated Inches*	*Concrete, insulated Inches*
2	30x48	41x62
3	30x60	41x84
4	48x54	59x66
6	48x76	59x88
8	51x102	59x110
10	51x126	59x134
12	51x150	59x158



Floor plan for milk house attached to the barn. Note that entrance has doors four feet apart to comply with health regulations.



Concrete block milk houses are economical, long lasting, sanitary. The diagram gives minimum cross section dimensions for a 4 can separate milk house.

JUNE, 1948

Thirty Days • Sixth Month

Days of Month	Days of Week	MOON'S PHASES, E. S. T. / HISTORICAL EVENTS	Moon's Place	LATITUDE of Northern States: Sun rises H. M.	Sun sets H. M.	Moon rises H. M.	Sun Fast	LATITUDE of Southern States: Sun rises H. M.	Sun sets H. M.	Moon rises H. M.
		● N. Moon, 7th, 7:55 A.M. ☽ F. Quar., 14th, 0:40 A.M. ○ F. Moon, 21st, 7:54 A.M. ◐ L. Quar., 29th, 10:23 A.M.								
1	Tu	Tennessee became a state, 1796	♓	4 25	7 30	1 38	2	4 53	7 02	1 32
2	We	Thomas Hardy born, 1840	♓	4 25	7 31	1 56	2	4 53	7 02	1 56
3	Th	Martial Law in Cuba, 1912	♓	4 24	7 31	2 17	2	4 53	7 03	2 22
4	Fr	Mexico declared war on U. S., 1845	♈	4 24	7 32	2 38	2	4 53	7 04	2 49
5	Sa	1st Wisconsin legislature met, 1848	♈	4 24	7 33	3 01	2	4 52	7 04	3 20
2nd Sunday after Trinity		Day's Length: Northern 15.10; Southern 14.13								
6	Su	Lillian Russell died, 1922	♉	4 23	7 33	3 32	1	4 52	7 05	3 57
7	Mo	Norway separated from Sweden, 1905	♉	4 23	7 34	sets	1	4 52	7 05	sets
8	Tu	James Freeman Clarke died, 1888	♊	4 23	7 35	9 21	1	4 52	7 06	8 45
9	We	1st postal route established, 1690	♊	4 22	7 35	10 20	1	4 52	7 06	9 44
10	Th	British schooner Gaspe burned, 1772	♋	4 22	7 36	11 08	1	4 52	7 07	10 37
11	Fr	Belleau Wood capt. by Marines, 1918	♋	4 22	7 37	11 45	0	4 51	7 07	11 21
12	Sa	Japs landed in Aleutian Islands, 1942	♌	4 22	7 37	morn	0	4 51	7 08	11 58
3rd Sunday after Trinity		Day's Length: Northern 15.16; Southern 14.17								
13	Su	Congress passes 14th Amend., 1866	♌	4 22	7 38	0 15	0	4 51	7 08	morn
14	Mo	Congress adopt. Stars & Stripes, 1777	♍	4 21	7 38	0 40	S	4 51	7 09	0 31
15	Tu	U.S. Marines invaded Saipan, 1944	♍	4 21	7 39	1 03	0	4 51	7 09	1 03
16	We	Storm in Missouri, 1912	♍	4 21	7 39	1 25	1	4 51	7 09	1 31
17	Th	Washington's commis. issued, 1775	♎	4 21	7 40	1 48	1	4 51	7 10	2 01
18	Fr	Clinton evacuated Philadelphia, 1778	♎	4 21	7 40	2 14	1	4 51	7 10	2 33
19	Sa	Texas annexed by United States, 1844	♏	4 21	7 40	2 43	1	4 52	7 11	3 09
4th Sunday after Trinity		Day's Length: Northern 15.19; Southern 14.19								
20	Su	1st Jap Parliament opened, 1875	♏	4 22	7 41	3 19	1	4 52	7 11	3 51
21	Mo	Morris Ketchum Jesup born, 1830	♐	4 22	7 41	rises	2	4 52	7 11	rises
22	Tu	Germans invaded Soviet Union, 1941	♐	4 22	7 41	9 14	2	4 52	7 11	8 38
23	We	Post & Gatty began world flight, 1931	♐	4 22	7 41	9 56	2	4 53	7 11	9 23
24	Th	John Cabot landed at St. John's, 1497	♑	4 23	7 42	10 30	2	4 53	7 11	10 02
25	Fr	French-Italian Armistice signed, 1940	♑	4 23	7 42	10 57	3	4 53	7 11	10 35
26	Sa	Russia resumed drive westward, 1944	♒	4 23	7 42	11 21	3	4 54	7 12	11 05
5th Sunday after Trinity		Day's Length: Northern 15.18; Southern 14.18								
27	Su	District of Arkansas created, 1806	♒	4 24	7 42	11 42	3	4 54	7 12	11 32
28	Mo	Treaty of Versailles signed, 1919	♒	4 24	7 42	morn	3	4 54	7 12	11 57
29	Tu	Tea tax imposed on colonists, 1767	♓	4 24	7 41	0 01	3	4 55	7 12	morn
30	We	1st passenger train on Erie R.R., 1841	♓	4 25	7 41	0 20	4	4 55	7 12	0 22

WEATHER FORECAST

Northeast: 1-3, threatening, cloudy; 4-7, possible showers; 8-12, clearing, turning cooler; 13-17, pleasant period; 18-21, changeable; 22-25, drop in temperature; 26-30, rain.

Southeast: 1-5, generally pleasant; 6-8, fair and cool; 9-13, unsettled; 14-18, possible local storms; 19-22, muggy, damp; 23-26, high wind, unsettled; 27-30, slight drop in temperature, comfortable.

Northwest: 1-3, unsettled, cloudy; 4-8, possibly thunder storm; 9-12, clearing, fair; 13-16, continued fair, changeable; 17-22, light showers expected; 23-27, sultry spell; 28-30, increasing winds.

Southwest: 1-4, hot, dry weather; 5-9, continued hot, winds in southern regions; 10-13, unsettled; 14-17, dust storm expected; 18-22, uncomfortable, very hot; 23-26, possible light showers; 27-30, turning pleasant.

LABOR SAVING—In many cases De Laval Milkers will save the entire time of one or more men while simultaneously reducing the time required to milk by hand.

"OUTMODED SEPARATING EATS UP PROFITS" — AMERICAN BUTTER INSTITUTE

Considerable sums of hard-earned cash are lost yearly to the dairy farmer through ignorance or false economy. Despite the good business sense and progressive-mindedness of the average American farmer there are still, at this day and age, thousands of butterfat producers who are throwing away a large part of their potential profits because of old-fashioned, wasteful methods of separating. The American Butter Institute, which represents approximately 500 butter manufacturers whose patrons total more than a million members, is engaged in a highly successful campaign to eliminate this waste of money and to increase the quality of butterfat supplied by producers.

The Research Committee of the American Butter Institute confronts us with some illuminating and startling facts in regard to butterfat losses through different methods of separating. Among other things it has found by thorough-going tests that an average of 18% of the original butterfat from the milk was lost in the skimmilk when water separators were employed. While 18% was an average, losses up to 28% were recorded in water dilutor separating.

Losses of butterfat were even greater where hand skimming was used, an average being 22% but losses up to 33% were found in many cases. Old, worn or poorly designed centrifugal separators were also found to be great money losers in spite of the fact that their owners had believed they were doing good work.

In contrast, it was conclusively proved that only a maximum of 0.6% of the



Hand skimming is the most wasteful, most expensive and most troublesome method of separating. It sends your profits to the hog pen.



The third cream-wasting method of separating is the water separator. It is slow, costly and wasteful.

original butterfat in the milk remained in the skimmilk when a good centrifugal separator was used. In the case of a new De Laval Separator the percentage is much lower than this average.

When the above-mentioned figures are converted into dollars and cents, the farmer who uses the water dilutor separator loses 29 pounds of the 160 pounds of butterfat produced by the average cow in the United States. Using the July 1946 price, which was 75 cents per pound of fat, as a basis of figuring his monetary loss amounts to $21.75 per cow per year.

With hand skimming 35 pounds of the 160 pounds of butterfat produced by the average cow is lost to the farmer.

When a centrifugal separator is used 0.96 pounds of the 160 pounds of butterfat produced by the average cow is lost to the farmer. Thus the loss would amount to only 73 cents per cow yearly. As has been pointed out before, in the case of new De Laval Separators the loss is far less.

The American Butter Institute's figures bear out the fact that it is poor economy indeed on the part of the dairy farmer not to change from the old-fashioned, wasteful methods of separating to up-to-date centrifugal separating. With his savings a one-cow producer can pay for his separator in approximately 18 months, a two-cow producer in nine months, a three-cow producer in six months, and a four-cow producer in four months.

Another benefit, the American Butter Institute points out on the basis of its research, is that cream produced by a centrifugal separator scores much higher



The old, worn or inefficiently designed centrifugal separator can also be a great money loser.

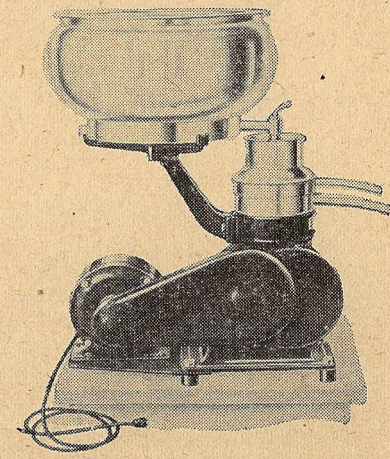
than cream obtained by water dilution and hand skimming methods. Consequently, it makes better butter which in turn finds better markets among the American people whose food standards and demands are constantly growing and must be met.

Also, less sediment was found in centrifugally separated cream than in cream separated by other means. Moveover, butter made from cream separated centrifugally deteriorated much less rapidly than that made from water dilution and hand skimming. The aggravation and wasted time which accompany the outmoded methods of separating are too well known to every farmer to warrant but brief mention.

These are all solid, substantial facts and they talk to the butterfat producer in terms of his own pocketbook. Innumerable producers throughout the country are learning these facts through the American Butter Institute's campaign and are becoming aware that there are no grounds for a belief that a small producer cannot afford a good centrifugal separator. New centrifugal quality separators are made to suit every pocketbook. For thousands of small producers De Laval Junior Separators are the answer, while the bigger producer will find a larger machine, such as is offered by the De Laval World's Standard Series ideally suited to his purpose. The separators in both of these series are clean-skimming and easy-cleaning machines, backing up the enviable reputation De Laval products have enjoyed since they first became pioneers and leaders in their field. There is no reason why any cream producer should use a cheap, inferior, old-fashioned separator, skim by hand or use a wasteful water Separator because he feels "he cannot afford a De Laval." There is a De Laval quality separator for everyone.

The De Laval Junior Series Separators are built with the small herd owner in mind to give him (1) cleanest skimming; (2) an easy-to-clean separator; (3) quality design, manufacture and materials for longest, most economical use; (4) highest quality of butterfat production; (5) the right style and capacity for his needs; (6) prompt, efficient local De Laval service; and (7) all these essential advantages at lowest price.

The American Butter Institute through its educational campaign for better skimming methods is performing a valuable public service which will benefit both the producer and the American public alike —the former, by teaching him how to prevent a part of his profits from going to the hog pen—the latter, by helping to raise the standards of American food production.



The facts all prove conclusively that "There's money in separating the De Laval way."



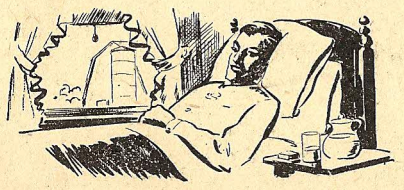
HOME NURSING

ADVICE FOR HOUSEWIVES

What to do when sickness comes is something that every wife and mother should know. These basic suggestions will be of assistance but are not intended to replace any definite instructions of your medical advisor.

The Sick Room should be a large and sunny bedroom. If the patient's own familiar room is suitable, use it. Some books, flowers or articles the patient likes should be on hand. But do not disorder the room with unnecessary clothing or drapes. And do not leave medicine bottles, utensils or food standing around. They only remind the patient of sickness.

The Air should be pure and not too warm. The old fear of fresh air did much harm. Fresh air will do much to aid sick persons, so see that there is ample ventilation. Naturally, direct drafts or cold air must be avoided.



Sunlight is a good morale builder. There should be plenty of it in the sick room unless the patient wishes to sleep or it hurts the eyes. In some ailments, of course, your doctor will forbid too much light.

Temperature of the room should be neither too warm nor too cold. In the daytime, 70° Fahrenheit is about right and at night 65°. The patient's night clothes should be reasonably warm. Too much warmth is weakening and must be avoided. In some case, of course, your physician will advise a very warm room and bed clothing.

The Bed should be comfortable, but firm. In long illnesses a bed that is almost hard is much more restful than one covered with double coil springs or a feather tick.

Cleanliness is very necessary to the patient's prompt recovery. The bedding should be aired daily and changed at least every other day. The patient should be washed completely once a day with warm (not hot) water, and dried quickly with a soft towel. To prevent tiring a weak patient, wash one part at a time and another after an interval of rest.

The hands and face should be washed, the teeth cleaned, the hair brushed, and so on, as often as in every day life. Of course, if the patient is very ill, your doctor or nurse will advise on this. However, anyone who has been ill knows how much better he feels after a careful cleansing.

The Attendant should be pleasant, willing to perform any service, cheerful at all times, should not be highly emotional or tempermental. Too many attentions and fussing are often irritating. The attendant should be sure that her presence and services are wanted. When they are not, they should not be forced on the patient, unless to administer medicines, or the like.

Visitors should be admitted if the patient is not too weak and has not a contagious ailment. It is well, however, to be sure that they will cheer up the patient. Visitors who excite or annoy him should be refused. It is better to hurt the visitor's feelings than the patient's health.

The Doctor thinks only of helping the patient back to health. His instructions should be followed to the letter, even if the patient objects. The advice of friends, relatives and neighbors, although given in all good faith, is usually worthless and frequently harmful, if it differs from that of your physician. He has studied the case and is applying his professional knowledge.



JULY, 1948

Thirty-one Days • Seventh Month

MOON'S PHASES, E. S. T.

- N. Moon; 6th, 4:09 P.M.
- F. Quar., 13th, 6:30 A.M.
- F. Moon, 20th, 9:31 P.M.
- L. Quar., 29th, 1:11 A.M.

Days of Month	Days of Week	HISTORICAL EVENTS	Moon's Place	Sun rises H. M.	Sun sets H. M.	Moon rises H. M.	Sun Slow	Sun rises H. M.	Sun sets H. M.	Moon rises H. M.
				LATITUDE of Northern States				LATITUDE of Southern States		
1	Th	Transcontinental airmail service, 1924	♈	4 25	7 41	0 40	4	4 56	7 12	0 49
2	Fr	General Brown took Fort Erie, 1814	♈	4 26	7 41	1 02	4	4 56	7 12	1 17
3	Sa	Quebec city founded, 1608	♈	4 26	7 41	1 29	4	4 57	7 12	1 51
6th Sunday after Trinity		Day's Length: Northern 15.14; Southern 14.15								
4	Su	Declaration of Independence, 1776	♉	4 27	7 41	2 02	4	4 57	7 12	2 30
5	Mo	British raided New Haven, 1779	♉	4 28	7 41	2 44	4	4 57	7 12	3 19
6	Tu	John Marshall died, 1835	♊	4 28	7 40	sets	5	4 58	7 11	sets
7	We	Japanese invaded China, 1937	♊	4 29	7 40	9 00	5	4 58	7 11	8 26
8	Th	Perry Expedition arrived Japan, 1853	♋	4 29	7 40	9 42	5	4 59	7 11	9 16
9	Fr	National Guard mobilized, 1917	♋	4 30	7 39	10 15	5	4 59	7 11	9 56
10	Sa	Germany ratified Peace Treaty, 1919	♌	4 31	7 39	10 43	5	5 00	7 10	10 32
7th Sunday after Trinity		Day's Length: Northern 15.07; Southern 14.10								
11	Su	Alexandria bombarded, 1882	♌	4 31	7 38	11 07	5	5 00	7 10	11 04
12	Mo	Battle of Jackson, 1863	♍	4 32	7 38	11 30	5	5 01	7 10	11 34
13	Tu	J. C. Fremont died, 1890	♍	4 33	7 37	11 53	6	5 01	7 09	morn
14	We	Bastile stormed, 1789	♎	4 34	7 37	morn	6	5 02	7 09	0 04
15	Th	Italian assault in the Dolomites, 1915	♎	4 34	7 36	0 18	6	5 02	7 09	0 35
16	Fr	Herman Rosenthal shot, 1912	♏	4 35	7 36	0 46	6	5 03	7 08	1 10
17	Sa	Bulgaria signed secret treaty, 1915	♏	4 36	7 35	1 19	6	5 03	7 08	1 49
8th Sunday after Trinity		Day's Length: Northern 14.57; Southern 14.04								
18	Su	Cloudburst in Nevada, 1912	♏	4 37	7 34	1 59	6	5 04	7 08	2 34
19	Mo	Honduras decl. war on Germany, 1918	♐	4 38	7 34	2 47	6	5 05	7 07	3 23
20	Tu	Kerensky became Rus. Premier, 1917	♐	4 39	7 33	rises	6	5 05	7 07	rises
21	We	Guam invaded by Americans, 1944	♑	4 40	7 32	8 31	6	5 06	7 06	8 01
22	Th	1st voyage U.S.S. Constitution, 1798	♑	4 41	7 31	9 00	6	5 07	7 06	8 36
23	Fr	U. S. Grant died, 1885	♒	4 42	7 30	9 25	6	5 07	7 05	9 06
24	Sa	Detroit settled by Cadillac, 1701	♒	4 43	7 29	9 46	6	5 08	7 05	9 34
9th Sunday after Trinity		Day's Length. Northern 14.44; Southern 13.55								
25	Su	1st Chinese Embassy ar. in U.S., 1878	♒	4 44	7 28	10 05	6	5 09	7 04	9 59
26	Mo	Louisburg captured by British, 1758	♓	4 45	7 27	10 24	6	5 10	7 04	10 24
27	Tu	Bank of England established, 1694	♓	4 46	7 26	10 43	6	5 10	7 03	10 49
28	We	Ger. declared war on Serbia, 1914	♓	4 47	7 25	11 04	6	5 11	7 02	11 17
29	Th	1st Almanac printed, 1472	♈	4 48	7 24	11 28	6	5 12	7 01	11 47
30	Fr	Wm. Penn died, 1718	♈	4 49	7 24	11 56	6	5 12	7 00	morn
31	Sa	London Bridge completed, 1831	♉	4 50	7 23	morn	6	5 13	6 59	0 23

WEATHER FORECAST

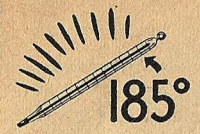
Northeast: 1-5, rising temperature; 6-10, extremely hot, muggy; 11-14, very uncomfortable period; 15-18, unsettled, hot; 19-22, cloudy, dull; 23-27, possible light showers; 28-31, damp, much cooler.

Southeast: 1-4, generally clear and cool; 5-9, rise in temperature; 10-13, sultry period; 14-19, continued warm; 20-23, typical July weather; 24-26, considerably cooler; 27-31, comfortable, rain expected.

Northwest: 1-3, generally pleasant; 4-8, hot spell expected; 9-12, generally unsettled, cloudy; 13-16, sultry after showers; 17-19, clearing, moderate temperature; 20-23, quite pleasant, cool evenings; 24-27, considerably cooler; 28-31, turning unsettled.

Southwest: 1-5, high winds; 6-11, very dry, increasing temperature; 12-14, cloudy, unsettled; 15-19, slight shower, cooler; 20-23, fair, pleasant weather; 24-26, possible showers; 27-31, clearing.

DEPENDABILITY—Their time-proved simplicity of design and rugged, quality construction have given De Laval Milkers a record of complete dependability on thousands of farms—dependability further backed by the expert service of local De Laval Dealers located in every town and city.



12 FULL GALLONS

With the DE LAVAL SPEEDWAY HEATER

Hot water—really hot—is necessary to successful dairying. Here's the sure, economical way of having really hot water ready at all times.

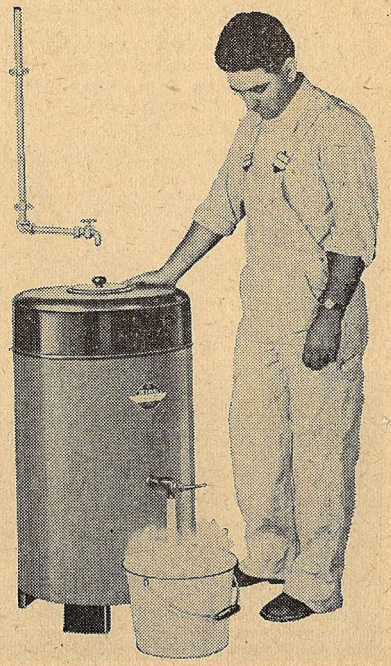


The De Laval Speedway Electric Water Heater has been designed and engineered by De Laval as the first real answer to the dairyman's urgent need for an honest-to-goodness dairy type water heater. Modern milk production requires that the dairyman have a convenient, economical and adequate supply of water really hot enough to be effective in washing and sterilizing his milker and other equipment.

It is in recognition of these requirements that the De Laval Speedway Electric Water Heater has been designed and is now offered to dairymen. It will once and for all furnish the complete answer to the dairyman's hot water problem.

The De Laval Speedway Water Heater is of advanced design and constructed throughout with typical De Laval regard for quality and high performance standards. It should not be classed with other types of water heaters which cannot compare with it in terms of hot water delivered at lowest cost.

Ready—when and where you want it!



Here are a few of its many important advantages:

—Automatic thermostatic control provides a full 12 gallons of 185° water (and that's hot!).

—High-efficiency heating element of advanced design and heavy all-over insulation provide great operating economy —real hot water at low cost.

—New type, quick-acting faucet of exclusive De Laval design enables fastest pouring—no waiting—pours a pailful in a flash.

—Long, dependable service assured. Inner "lifetime" tank of heavy copper, insulation water-proof; outer tank of heavy gauge steel, bonderized and painted on both sides. Top lid of heavy, heat-resistant, synthetic rubber.

—Cannot be damaged if current remains on and tank is empty. Design enables easy, thorough cleaning.

—Absence of concentrated "hot spot" prevents formation of excessive mineral deposits inside tank.

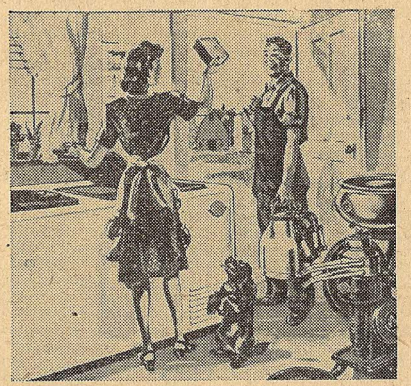


BETTER FARM TABLE FARE

MADE POSSIBLE BY THE FOOD FREEZER

Here is how the modern food freezer means better meals at lower cost to the entire farm family—and less work for mother!

In recent years a tremendous change has taken place in the eating habits of the American people. To a large measure this change, which has provided more varied and nutritious foods to millions of people, has been brought about by the rapid development of the technique of food freezing. It has been common knowledge for many years that freezing food would preserve it over long periods of time but only in comparatively recent years have we acquired the necessary technical know-how to enable us to create, control and use freezing temperatures economically, safely and conveniently in preserving foods.



For a number of years now community locker plants have appeared all over the country and they have played an important part in educating and familiarizing people in the value and use of frozen food and in popularizing the qualities of original freshness, flavor and appearance which frozen food possesses.

Now this new field has been entered by the home food freezer and rural America has been quick to grasp the great possibilities opened up by this innovation. The farmer has realized that when he is buying a food freezer he is not only buying a piece of equipment—he is really buying *low temperature* which in turn means *better eating at lower cost*. He will be able to enjoy more varied foods, without regard to season—fresh vegetables on his table six months to a year after they have been gathered; fruit as firm and luscious in the middle of the winter as on the day it was picked; the choicest and most delicious cuts of meats, whenever he wishes. His kitchen garden, berry patch and orchard need no longer be a mere summertime food source but can be extended through the cold of the winter.

The home food freezer enables the housewife to plan meals of better dietary balance for her family—meals that will tickle and stimulate appetites while building up the health and strength of those who enjoy them.

In spite of all the advantages it offers, the food freezer is no expensive proposition. On the contrary, it effects real savings in the family food bill by enabling the farmer to make better use of the productivity of his own soil. It is illogical and uneconomical for the farm family to purchase food that can be produced at home and the food freezer preserves and stores this food at a fraction of the cost. The food freezer eliminates those pyramids of cans that are so often seen on the farmer's garbage dump.

Let's take an example. Meat that could be produced on the farm for 15 cents a pound or sold to the butcher for a little more, costs many times that when the farmer has to buy it back for his own table. Many farm families save $150.00 or more a year on their meat bills alone, not to mention similar savings on other family food purchases. In many cases food freezers will pay for themselves in the first year of use. Also, as fewer trips to the food store are necessary further savings are effected. The ready availability of a wide range of assorted, delicious food right in the home is a convenience appreciated by the entire family. The one member of the household, however, who will benefit most by the home food freezer is the housewife. She will hail it as the means of providing fresh and varied foods and as a lifesaver which relieves her of much exhausting, unpleasant drudgery.

AUGUST, 1948

Thirty-one Days • Eighth Month

MOON'S PHASES, E. S. T.

- N. Moon, 4th, 11:13 P.M.
- F. Quar., 11th, 2:40 P.M.
- F. Moon, 19th, 0:32 P.M.
- L. Quar., 27th, 1:46 P.M.

Days of Month	Days of Week	HISTORICAL EVENTS	Moon's Place	LATITUDE of Northern States: Sun rises H. M.	Sun sets H. M.	Moon rises H. M.	Sun Slow H. M.	LATITUDE of Southern States: Sun rises H. M.	Sun sets H. M.	Moon rises H. M.
10th Sunday after Trinity		Day's Length. Northern 14.30; Southern 13.46								
1	Su	Germany decl. war on Russia, 1914	♉	4 51	7 21	0 33	6	5 13	6 59	1 06
2	Mo	East India Company dissolved, 1858	♉	4 52	7 20	1 22	6	5 14	6 58	1 58
3	Tu	Women's Rights Conv., Roch.,1848	♉	4 53	7 19	2 25	6	5 15	6 57	3 01
4	We	British army mobilized, 1914	♊	4 54	7 18	sets	6	5 16	6 56	sets
5	Th	1st Atlantic cable message sent, 1858	♊	4 55	7 17	8 11	6	5 17	6 56	7 50
6	Fr	Georgia passed a prohibition act,1907	♌	4 56	7 16	8 41	6	5 17	6 55	8 28
7	Sa	Lafayette bade farewell to Amer.1825	♌	4 57	7 14	9 08	6	5 18	6 54	9 02
11th Sunday after Trinity		Day's Length: Northern 14.15; Southern 13.35								
8	Su	Louisiana ratified prohibition, 1918	♍	4 58	7 13	9 33	5	5 18	6 53	9 33
9	Mo	1st steam train in U. S., 1831	♍	4 59	7 12	9 56	5	5 19	6 52	10 04
10	Tu	First American Army formed, 1918	♎	5 00	7 11	10 21	5	5 19	6 51	10 37
11	We	Peace between Latvia & Russia, 1920	♎	5 01	7 09	10 48	5	5 20	6 50	11 11
12	Th	Edison invented Phonograph, 1877	♎	5 02	7 07	11 19	5	5 21	6 49	11 48
13	Fr	World's 1st taxi appear. in N.Y.,1907	♏	5 03	7 06	11 57	5	5 21	6 48	morn
14	Sa	Mine explosion in Wyoming, 1923	♏	5 04	7 04	morn	5	5 22	6 47	0 31
12th Sunday after Trinity		Day's Length: Northern 13.58; Southern 13.23								
15	Su	Ethel Barrymore born, 1879	♐	5 05	7 03	0 43	4	5 23	6 46	1 19
16	Mo	British Army landed in France, 1914	♐	5 06	7 01	1 37	4	5 23	6 45	2 13
17	Tu	Frapelle captured, 1918	♑	5 08	7 00	2 36	4	5 24	6 44	3 11
18	We	Belgian debt funded, 1925	♑	5 09	6 59	3 39	4	5 25	6 43	4 08
19	Th	Hitler made Ger. Leader-Chan., 1934	♑	5 10	6 57	rises	3	5 26	6 42	rises
20	Fr	Pope Pius X died, 1914	♒	5 11	6 56	7 51	3	5 26	6 41	7 37
21	Sa	Battle of Six Mile House, 1864	♒	5 12	6 55	8 11	3	5 27	6 40	8 03
13th Sunday after Trinity		Day's Length: Northern 13.40; Southern 13.11								
22	Su	Eng. Army landed on L. Island, 1776	♓	5 13	6 53	8 30	3	5 28	6 39	8 28
23	Mo	Government organized in Ark., 1808	♓	5 14	6 52	8 48	3	5 28	6 37	8 52
24	Tu	British captured Washington, 1814	♓	5 15	6 50	9 08	2	5 29	6 36	9 18
25	We	Bradstreet at. Ft. Frontenac, 1757	♈	5 17	6 49	9 29	2	5 29	6 34	9 46
26	Th	Mathias Erzberger assassinated, 1921	♈	5 18	6 47	9 56	2	5 30	6 33	10 19
27	Fr	Austria decl. war on Japan, 1914	♉	5 19	6 45	10 28	1	5 31	6 32	10 58
28	Sa	James Wilson died, 1798	♉	5 20	6 43	11 10	1	5 31	6 31	11 45
14th Sunday after Trinity		Day's Length: Northern 13.20; Southern 12.58								
29	Su	Fr. colonists landed in Florida, 1565	♊	5 21	6 41	morn	1	5 32	6 30	morn
30	Mo	Agreement of London signed, 1924	♊	5 22	6 39	0 05	1	5 32	6 29	0 41
31	Tu	Charleston, S. C. earthquake, 1886	♋	5 23	6 38	1 12	0	5 33	6 28	1 48

WEATHER FORECAST

Northeast: 1-5, typical August weather; 6-10, much hotter; 11-14, generally unsettled; 15-19, possible rain; 20-23, showers, turning cooler; 24-26, cloudy, dull; 27-31, clearing.

Southeast: 1-3, hot and muggy; 4-9, slight drop in temperature; 10-13, pleasant weather; 14-18, turning unsettled; 19-22, showers; 23-25, generally unpleasant; 26-31, variable.

Northwest: 1-4, high humidity; 5-8, increasing winds, cooler; 9-12, cloudiness; 13-17, very hot and uncomfortable; 18-22, light showers expected; 23-27, turning cooler, pleasant; 28-31, sweltering weather expected.

Southwest: 1-5, cooler in northern sections; 6-11, hot, dry weather; 12-15, unsettled, cloudy; 16-20, possible showers; 21-24, clearing, pleasant period; 25-28, hot and humid; 29-31, sultry.

ELIMINATES DRUDGERY—Hand milking is the most disliked job on the farm. It is slow, tiresome and laborious, often leading to aching hands and arms. De Laval Milkers convert milking into a pleasant chore.



TIME SAVERS

FOR THE FARM LAUNDRY

Here are some tricks to save time in doing the family laundry. Possibly you are using some of them. Others will be new to you. All are practical and have been tested in use.

To remove candlewax from table linen, scrape off as much as possible with a dull knife, being careful not to damage the material. Place a piece of blotting paper under the remaining wax and apply a hot iron. Move the blotting paper around so that it will absorb the melted wax.



When ironing folded sheets and linens, iron up to the fold, not across it. Sharp creases may look well but will result in breaks and tears before the material is worn out.

After cleaning clothes with gasoline or other cleaner, the odor may be removed by wetting the cloth used in pressing with a mixture of one part of water to two parts of vinegar.

When you are ironing, watch for the garments that need mending and pin a piece of brown paper on each one. This saves checking them afterward.

After washing leather gloves, place a clothes pin in each finger and hang them up to dry. When dry, knead and rub them soft.

Rinsing white organdie in a strong solution of salt is much better than starch.



Some curtains may be dried after washing by slipping them on the window curtain rod while still wet and inserting another rod through the bottom hem. The weight dries the curtains so that they rarely require ironing.

To sprinkle clothes quickly, put them back in the dry washing machine, a few at a time, sprinkling as you go. Place the cover on the machine and leave until ready to iron.

To prevent flannels from shrinking, use soap jelly instead of soap and rinse in lukewarm water. Hang up at once and dry quickly, but not too close to a fire to cause steaming. Do not iron while still damp.

When soaking clothes overnight to loosen soil and dirt, add one tablespoon of baking soda to each gallon of water. This acts efficiently and does not tend to streak or fade clothes as soapy water may.

When garment colors tend to run in washing, soak the garments first in cold water containing a little vinegar or acetic acid.

Clothes pins are handy when hanging clothes, if placed in a small basket and hung by a bent wire from the clothes line, so they can be pushed ahead as the clothes are hung. A clothes line spreader is even better for this purpose.



When dampening clothes before ironing, use hot water instead of cold. It will enable you to start ironing sooner.

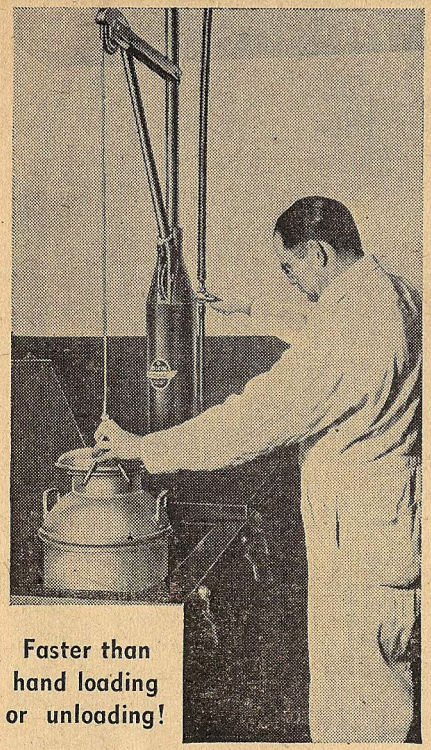
When washing rag rugs, add some starch to the last rinse water. It will make them last longer.



To clean a soiled clothesline, wrap it around a small washboard, place in tub and scrub with soapsuds. Dry by stretching in its usual place.

Washer wringers will last longer if thoroughly dried after each washing. This can be done quickly by running a dry soft towel through the rollers. Then release the tension and insert a small wooden wedge, or clothespin between the rollers so they will dry completely.

THE DE LAVAL SPEEDWAY VACUUM CAN HOIST SAVES YOUR BACK



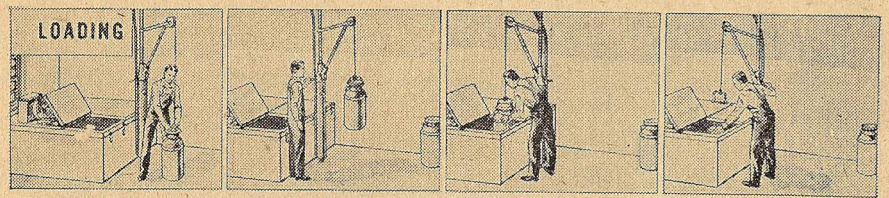
Faster than hand loading or unloading!

The De Laval Speedway Vacuum Can Hoist provides the answer that dairymen have been wanting to the problem of easier and faster loading and unloading of the milk cooler.

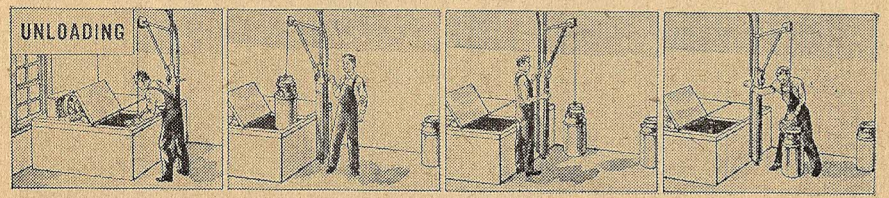
It operates on 10 inches of vacuum supplied by the milker vacuum pump (of any make) and hence costs nothing extra for power. It does not interfere with the milking because it requires no more vacuum than an additional milker unit.

The De Laval Speedway Vacuum Can Hoist is simple to operate. The "Bull-Dog" Grapple is slipped over the neck of the 40-quart can. When the control lever is moved vacuum raises the can which is then swung into position over the cooler. Moving the control lever releases the vacuum and the can is quickly lowered into the cooler. Cans are removed from the cooler in the same manner.

Any boy or girl can operate the De Laval Speedway Vacuum Can Hoist. It is faster than hand loading or unloading, safe and dependable. "Use your Hoist—and save your back!"



Attach grapple | Raise can | Lower into cooler | Detach grapple



Attach grapple | Raise from cooler | Lower to floor | Detach grapple



ROOF REPAIRS

BY THE FARM HANDYMAN

Many of the small defects that occur in farm building roofs can be readily repaired by a practical man to keep water from the interior and to extend the life of the roof. The tools and materials required usually are on hand in the farm maintenance shop.

LOCATING LEAKS

Leaks are sometimes difficult to locate, but an examination of the wet spots on a ceiling furnishes a clue to the probable location. If near a chimney or exterior wall the leak is probably due to defective or narrow flashings, loose mortar joints, or dislodged coping. On flat roofs the trouble may be due to the downspouts being chopped, or to an accumulation of water or snow on the roof higher than the flashing. Roofing deteriorates more rapidly on a south than on a north exposure, especially when wood or composition shingles are used. The south slope of a roof should be watched closely for leaks.

Wet spots under plain roof areas are generally caused by holes in the covering. Frequently the drip may occur much lower down the slope than the hole. Leaky downspouts permit water to splash against the wall and the wind-driven water may find its way through a defect and wet interior walls.

Periodic inspections should be made to detect breaks, missing shingles, choked gutters, or damaged flashings, and also defective mortar joints of chimneys, parapets, coping, etc. At the first appearance of damp spots on ceilings or second-story walls, a careful examination of the roof should be made to determine the cause, and the defect should be repaired.

MAKING REPAIRS

Shingle Roofs. Missing shingles may be replaced with similar shingles, pieces of rust-resistant metal, or with metal cut from a tin can and painted on both sides. The repair pieces are slipped under the shingles in the upper layer. Old nails can be cut out with a long, thin cold chisel or metal saw. After the repair has been made exposed nails should be covered with roofers' cement.

Metal Roofs. Small holes in metal roofing should be closed with a drop of solder, and larger ones with a patch of the same kind of roofing soldered over the hole. When soldering tools are not at hand small holes may be sealed with a plug of roofers' cement and larger holes by cementing a piece of canvas over the hole, using thick paint for the adhesive and applying several coats of paint on top.

When metal roofing is riddled with small pinholes and it is not feasible to reroof for several years, an application of a thick bituminous or asbestos paint may be effective. These materials are readily available at builders' supply houses. They are sometimes used on roll roofing and composition shingles when the surfaces have been worn fuzzy by the elements. Asphalt coatings should not be used on tarred felt nor should coatings having a tar base be used on asphalt felt.

Built-up Roofs. Holes in built-up roofing are difficult to locate. Leaks generally occur in sinks or low places in the roof. The loose gravel or slag should be swept aside for later use and the various layers of felt and tar coatings cut out. The layers should be cut out in steps so that the bottom layers has the smallest area and the succeeding layers will lap over the next lower by 1 to 2 feet, thus preventing a hump when the patch is completed. The patches must be embedded in hot tar or asphalt, and a generous application of the tar poured over the last layer for embedding the gravel. If a built-up roof needs repairs in many places it may be advisable to put on a new roof.

Flashing. When repairing any type of roofing, loose flashing should be securely fastened in place and joints filled with roofer's cement. If the joint in which the flashing is anchored is wide, oakum rolled in roofer's cement and calked in the joint will prove economical and effective. The metal of open valleys, if badly corroded, should be replaced with new metal. Closed valleys are more difficult to repair, and if it is not feasible to slip pieces of metal up under the shingles where leaks occur the services of a roofer should be obtained. Square pieces of metal folded on the diagonal should be used so that the wedge point may be slid past nails.

SEPTEMBER, 1948

Thirty Days • Ninth Month

MOON'S PHASES, E. S. T.

- ● N. Moon, 3rd, 6:21 A.M.
- ◗ F. Quar., 10th, 2:05 A.M.
- ○ F. Moon, 18th, 4:43 A.M.
- ◖ L. Quar., 26th, 0:07 A.M.

Days of Month	Days of Week	HISTORICAL EVENTS	Moon's Place	LATITUDE of Northern States: Sun rises H. M.	Sun sets H. M.	Moon rises H. M.	Sun Fast	LATITUDE of Southern States: Sun rises H. M.	Sun sets H. M.	Moon rises H. M.
1	We	Wm. Penn sailed from Deal, 1682	♋	5 24	6 36	2 29	0	5 34	6 26	2 59
2	Th	Jap. sign sur. on U.S.S. Missouri, 1945	♌	5 25	6 35	3 51	0	5 35	6 24	4 15
3	Fr	Gr. Britain decl. war on Ger., 1939	♌	5 26	6 33	sets	1	5 35	6 23	sets
4	Sa	Zeppelin completed world flight, 1929	♍	5 27	6 32	7 31	1	5 36	6 22	7 30
15th Sunday after Trinity		Day's Length: Northern 13.02; Southern 12.44								
5	Su	Senator Lafollette renominated, 1922	♍	5 28	6 30	7 56	1	5 37	6 21	8 01
6	Mo	King Carol abdicated, 1940	♍	5 29	6 28	8 21	2	5 37	6 19	8 33
7	Tu	Amer. paratroopers land. at Lae, 1943	♎	5 30	6 26	8 47	2	5 38	6 18	9 07
8	We	Battle on Lake George, 1755	♎	5 31	6 24	9 18	2	5 38	6 17	9 46
9	Th	Thomas Hutchinson born, 1711	♏	5 32	6 22	9 55	3	5 39	6 16	10 28
10	Fr	Allied peace with Austria signed, 1919	♏	5 33	6 20	10 38	3	5 40	6 14	11 14
11	Sa	"Half Moon" sailed up Hudson, 1609	♐	5 35	6 19	11 30	3	5 40	6 13	morn
16th Sunday after Trinity		Day's Length: Northern 12.41; Southern 12.30								
12	Su	Battle of Lexington, Mo., 1861	♐	5 36	6 17	morn	4	5 41	6 11	0 06
13	Mo	Alaska gold strike, 1914	♑	5 37	6 15	0 27	4	5 42	6 10	1 03
14	Tu	Henry Jackson Hunt born, 1819	♑	5 38	6 14	1 30	5	5 42	6 09	2 02
15	We	1st railroad in England opened, 1830	♑	5 39	6 12	2 34	5	5 43	6 07	3 00
16	Th	Moscow burned by the Russians, 1812	♒	5 40	6 10	3 38	5	5 43	6 06	3 57
17	Fr	Washington's Farewell Address, 1796	♒	5 41	6 08	4 40	6	5 44	6 05	4 53
18	Sa	Hurricane in Florida, 1926	♓	5 42	6 06	rises	6	5 45	6 03	rises
17th Sunday after Trinity		Day's Length: Northern 12.21; Southern 12.17								
19	Su	Battle of Stillwater, 1777	♓	5 43	6 04	6 54	6	5 45	6 02	6 57
20	Mo	Britain quit gold standard, 1931	♓	5 44	6 02	7 13	7	5 46	6 01	7 22
21	Tu	Gas plant explosion on Rhine, 1921	♈	5 45	6 00	7 34	7	5 46	5 59	7 49
22	We	Nation wide steel strike, 1919	♈	5 46	5 59	7 58	7	5 47	5 58	8 21
23	Th	Tarrytown, N. Y., captured, 1780	♈	5 47	5 57	8 28	8	5 48	5 57	8 58
24	Fr	Greece mobilized forces, 1915	♉	5 48	5 55	9 05	8	5 49	5 55	9 39
25	Sa	Congress adopted Bill of Rights, 1789	♉	5 49	5 54	9 56	8	5 49	5 54	10 31
18th Sunday after Trinity		Day's Length: Northern 12.02; Southern 12.03								
26	Su	Geo. Gershwin born, 1898	♊	5 50	5 52	10 56	9	5 50	5 53	11 32
27	Mo	Edwin Booth's N. Y. debut, 1850	♊	5 51	5 50	morn	9	5 51	5 51	morn
28	Tu	Penn. adopted state constitut'n, 1776	♋	5 52	5 49	0 05	9	5 51	5 50	0 39
29	We	Poland divided by Rus. & Ger., 1939	♋	5 54	5 47	1 24	10	5 52	5 48	1 51
30	Th	Chas. Pomeroy Stone born, 1824	♌	5 55	5 45	2 44	10	5 53	5 47	3 04

WEATHER FORECAST

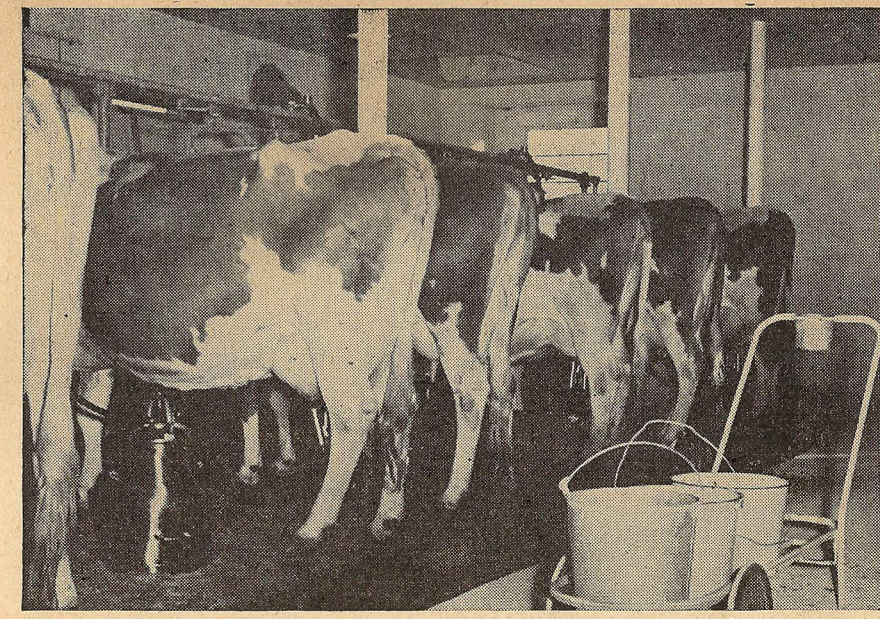
Northeast: 1-3, very cool spell; 4-7, changeable; 8-12, rise in temperature; 13-17, continued warm, clouds; 18-22, threatening; 23-26, local squalls; 27-30, high winds, cooler.

Southeast: 1-4, warm winds; 5-8, pleasant period, cool nights; 9-13, unsettled, cloudiness; 14-18, rain expected, cooler; 19-23, continued cool; 24-27, turning quite warm; 28-30, increasing winds.

Northwest: 1-5, variable; 6-9, quite warm and comfortable; 10-14, generally unsettled; 15-19, disagreeable weather; 20-23, local storms; 24-27, turning warmer, very pleasant; 28-30, increasing winds.

Southwest: 1-4, warm spell; 5-9, dull, unsettled; 10-13, variable with showers probable; 14-18, light showers; 19-22, clearing, continued warm; 23-26, cooler, very pleasant; 27-30, typical seasonal weather.

LOWER PRODUCTION COSTS—The use of a De Laval Milker through its savings of time and labor reduces the dairy farmer's cost of milk production—an important business consideration.



THE DE LAVAL SPEEDWAY MILKING TRUCK SYSTEMATIZES FAST MILKING

The De Laval Speedway Milking Truck is expertly designed to help the dairyman carry out his fast milking program with best results and the greatest efficiency and convenience.

It is a "must" for fast milking—essential in obtaining all the advantages of the fast milking method. With it the Strip Cup and four pails required for the clean udder towels, chlorine solution, hot water and used udder towels can be moved down the milking line in a convenient and orderly way as the milking progresses. The equipment travels with the milker operator and is always within arm's reach when he needs it.

In larger dairies it is advantageous to use two or more De Laval Milking Trucks. Maximum efficiency is easier to attain with each operator's equipment close at hand.

To completely systematize your fast milking program . . . to reap all its benefits . . . and to save the greatest amount of time and labor see your local De Laval Dealer who sent you this book for your De Laval Speedway Milking Truck.

The De Laval Speedway Milking Truck is furnished complete with four white-enameled or galvanized pails and a De Laval Strip Cup.





SLIP COVERS

EASILY MADE AT HOME

Slip covers are the cheapest, quickest, easiest way of making old upholstered furniture look new, to give fresh color to a discouraged room. Successful slip covers are the result of knowing just a few tricks, and using common sense.

Plain colors, small figures and narrow stripes are easiest for the beginner. Large figures are harder, plaids hardest of all. Materials should be durable, closely woven, not too heavy to sew easily. Chintzes, cretonnes, and tickings are excellent. You can use dress materials, bedspreads, even dyed feed bags.

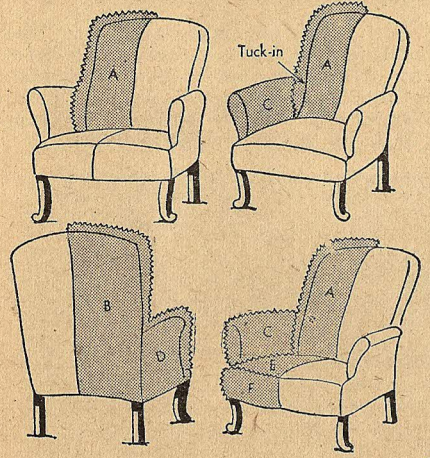
THE PATTERN IS FIRST

Buy a paper pattern if you can find one that anywhere near fills your needs. One big dress-pattern company offers a choice of seven chair styles, complete with simple instructions you follow step by step. All you have to do is to adjust the pattern to the chair as you would a dress-pattern to your own figure . . . place the pattern on your material and cut!

But if your chair is such an odd shape that you can adapt no commercial pattern to it, why then make a pattern yourself. This is the way.

Find the center of your chair top and bottom. Tie a piece of string around the chair and pin it to the exact center.

Now take an old sheet and with pencil and yardstick mark, at intervals of one foot, the crosswise threads. This is to make sure that on all pieces of pattern you make from this sheet, you are SURE to place the crosswise threads PARALLEL TO THE FLOOR.



Starting at the center line, cut a piece for the inside of the back (A) leaving ample material for seams and an extra inch-and-a-half for tuck-in at the crack where the back meets the arm. Next in the same manner, cut the outside of the back (B). Pin B to A in a seam along the top of the chair. In like manner cut a piece to fit the inside of the arm (C) allowing an inch-and-a-half tuck-in where this seam joins (A). Next cut the outside of the arm (D). Now cut a piece to cover one half the seat (E). Cut a piece to cover one half the front (F).

Adjust the pins so that all seams are straight and follow the curves of the chair. Make the pattern snug. Adjust fullness making neat folds where necessary. Trim edges down to allow three quarters of an inch for seams.

Mark each piece while on the chair "Outside of back", "Inside of back" etc. Now remove pattern from chair without taking the pins out of the seams. Mark seams with pencil on *both sides*. Notch so that notches can be matched, then take out the pins.

CUT AND SEW LIKE A DRESS

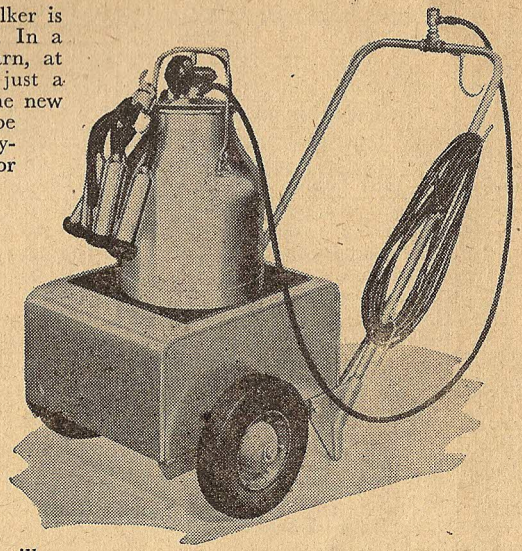
To cut, place the sheet-pattern on your good material, being careful that the designs of the material come in the proper places such as the center of the back, the center of the arms, the center of the front. Cut and stitch.

French seams give an easy and tailored finish. Stitch first on the wrong side, then on the right. Cushions are made in box style, separately, and should be reversible. Valances are made with box pleats and hang to one inch of the floor.

You can save money by using unbleached muslin for the seat beneath the cushion where it will not show, and by making the pleats on the valance far apart. Be sure to allow a back opening so the cover can be easily slipped on and off. And if you are going to wash it, preshrink the material first.

STREAMLINED AND HANDY — THE NEW DE LAVAL PORTABLE MILKER

The new De Laval Portable Milker is an outfit of many profitable uses. In a smaller barn, in the maternity barn, at the dairy cattle show—these are just a few of the many ways in which the new De Laval Portable Milker can be utilized to good advantage. Dairymen naturally look to De Laval for the best in milking equipment and for those dairymen who find that a portable type milker best meets their needs De Laval offers the new De Laval Portable Milker—the most advanced milker of this type.

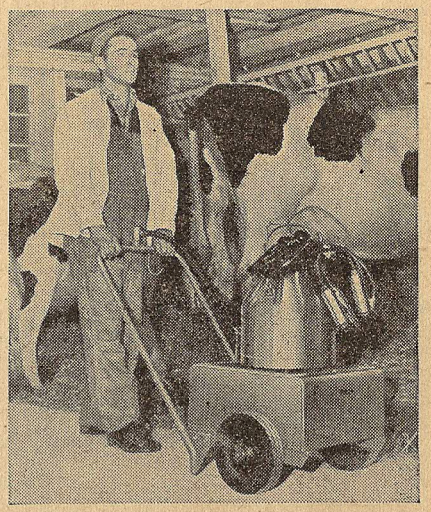


Sturdily mounted on rugged, easy-turning wheels with semi-pneumatic tires, the new De Laval Portable Milker is easy to handle, convenient and compact. The vacuum pump and motor are concealed by a streamlined hood which also forms the platform on which the standard De Laval Sterling Milker unit is mounted. A simple locking device holds the milker unit securely in place.

Because the vacuum pump and milker unit are regular De Laval Sterling Milker equipment, the milking performance and sanitary qualities of the new De Laval Portable Milker are of the highest standard. Furnished with single or double unit.

The new De Laval Portable Milker uses a standard De Laval Sterling Milker Pump, Unit and other parts. For this reason the user of a new De Laval Portable Milker can readily convert it to a standard pipe line installation at any time that he might decide to do so. This feature is an important advantage to consider.

No matter what your milking problem may be there is a De Laval Milker just right for you.



Easy to handle, always ready—the De Laval Portable does a real job of De Laval quality milking.

OCTOBER, 1948

Thirty-one Days • Tenth Month

MOON'S PHASES, E. S. T.

- N. Moon, 2nd, 2:42 P.M.
- F. Quar., 9th, 5:10 P.M.
- F. Moon, 17th, 9:23 P.M.
- L. Quar., 25th, 8:41 A.M.

Days of Month	Days of Week	HISTORICAL EVENTS	Moon's Place	LATITUDE of Northern States: Sun rises H. M.	Sun sets H. M.	Moon rises H. M.	Sun Fast	LATITUDE of Southern States: Sun rises H. M.	Sun sets H. M.	Moon rises H. M.
1	Fr	Second Liberty Loan drive, 1917	♋	5 56	5 43	4 06	10	5 54	5 46	4 17
2	Sa	Major John Andre hanged, 1780	♍	5 57	5 42	sets	11	5 54	5 44	sets
19th Sunday after Trinity		Day's Length: Northern 11.42; Southern 11.48								
3	Su	Buffalo Gazette 1st published, 1811	♍	5 58	5 40	6 20	11	5 55	5 43	6 28
4	Mo	King Ferdinand abdicated, 1918	♎	5 59	5 38	6 45	11	5 55	5 42	7 02
5	Tu	Allies landed at Salonika, 1915	♎	6 00	5 36	7 14	12	5 56	5 41	7 39
6	We	1st German settlers in America, 1683	♏	6 02	5 35	7 49	12	5 57	5 39	8 20
7	Th	German troops enter Rumania, 1940	♏	6 03	5 33	8 31	12	5 58	5 38	9 07
8	Fr	N. Y. Central Railroad opened, 1851	♐	6 04	5 31	9 23	12	5 58	5 37	9 59
9	Sa	Bad forest fires in Wisconsin, 1871	♐	6 05	5 30	10 19	13	5 59	5 35	10 55
20th Sunday after Trinity		Day's Length: Northern 11.22; Southern 11.34								
10	Su	Minneapolis first settled, 1852	♐	6 06	5 28	11 19	13	6 00	5 34	11 53
11	Mo	Charter granted Amsterdam Co., 1614	♑	6 07	5 26	morn	13	6 01	5 33	morn
12	Tu	Columbus sighted land, 1492	♑	6 08	5 24	0 24	14	6 01	5 32	0 52
13	We	Cornerstone White House laid, 1792	♒	6 09	5 22	1 28	14	6 02	5 30	1 50
14	Th	Ger. Sub. sunk H.M.S. Roy. Oak, 1939	♒	6 10	5 21	2 31	14	6 03	5 28	2 46
15	Fr	Mata Hari, spy, shot, 1917	♒	6 11	5 19	3 33	14	6 03	5 27	3 42
16	Sa	Noah Webster, scholar, born, 1758	♓	6 12	5 17	4 35	14	6 04	5 26	4 36
21st Sunday after Trinity		Day's Length: Northern 11.02; Southern 11.20								
17	Su	U.S. troops entered Aachen, 1944	♓	6 14	5 16	rises	15	6 05	5 25	rises
18	Mo	Thomas A. Edison died, 1931	♈	6 15	5 14	5 39	15	6 06	5 24	5 53
19	Tu	1st Mass. general court, 1630	♈	6 17	5 13	6 02	15	6 06	5 23	6 23
20	We	Hurricane killed 600 in Cuba, 1926	♈	6 18	5 11	6 30	15	6 07	5 22	6 58
21	Th	Edison inv. incandescent lamp, 1879	♉	6 19	5 10	7 05	15	6 07	5 21	7 38
22	Fr	Constance Bennett, actress, b., 1905	♉	6 20	5 09	7 51	16	6 08	5 20	8 27
23	Sa	Brit. broke Axis line, El Alamein, 1942	♊	6 21	5 07	8 47	16	6 09	5 19	9 24
22nd Sunday after Trinity		Day's Length: Northern 10.44; Southern 11.08								
24	Su	U.S. Navy won Battle Leyte Gulf, 1944	♊	6 22	5 06	9 52	16	6 10	5 18	10 28
25	Mo	1st Erie canal boat left Buffalo, 1825	♋	6 23	5 04	11 06	16	6 11	5 17	11 36
26	Tu	1st Continental Congress ended, 1774	♋	6 24	5 02	morn	16	6 12	5 16	morn
27	We	Theodore Roosevelt, pres., b., 1858	♌	6 26	5 01	0 24	16	6 13	5 15	0 46
28	Th	Emden sunk Russian cruiser, 1914	♌	6 28	5 00	1 43	16	6 13	5 14	1 57
29	Fr	Turk. naval attack in Black Sea, 1914	♍	6 29	4 58	3 00	16	6 14	5 13	3 08
30	Sa	St. Paul's Chapel, N.Y.C., open, 1766	♍	6 30	4 57	4 17	16	6 15	5 12	4 17
23rd Sunday after Trinity		Day's Length: Northern 10.25; Southern 10.56								
31	Su	1st message over Pacific cable, 1902	♍	6 31	4 56	5 35	16	6 15	5 11	5 25

WEATHER FORECAST

Northeast: 1-3, cool and fair; 4-7, turning unsettled; 8-12, showers, generally unpleasant; 13-16, cool, cloudy and dull; 17-22, slight rise in temperature; 23-27, strong winds; 28-31, variable.

Southeast: 1-5, increasing temperature; 6-8, generally fair and mild; 9-13, unsettled; 14-17, cooler but pleasant; 18-21, increasing winds in southern regions; 22-26, cloudy, rain; 27-31, clearing.

Northwest: 1-3, fair and very pleasant; 4-7, turning cooler and cloudy; 8-11, threatening with high winds; 12-15, rain storm; 16-19, clearing, generally cool but pleasant; 20-23, continued cool; 24-27, local storm expected; 28-31, changeable.

Southwest: 1-4, warm rains; 5-9, clearing, turning pleasant; 10-14, high winds, continued warm; 15-18, bad storms; 19-23, increasing winds, some rain; 24-28, variable; 29-31, possible showers, cool.

HIGHER PROFITS—Lowered production costs and increased milk production naturally mean bigger returns to the De Laval Milker user. A De Laval Milker means a more profitable dairy for you.

GOOD MILKING *vs.* GOOD GUESSING

TAKES "HUMAN FAILURE" OUT OF YOUR MILKING

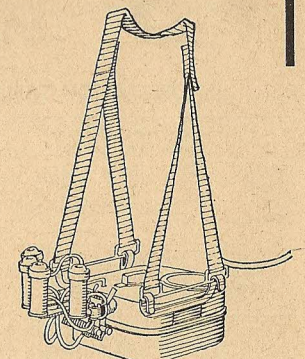
Guesswork has no place in your program of higher milk production and maintenance of sound, healthy udders.

Most milking machines require that the operator do some good guessing about the various adjustments that have to be made. Pulsation speed has to be adjusted and may be speeded up or slowed down frequently to a point which means very inefficient milking.

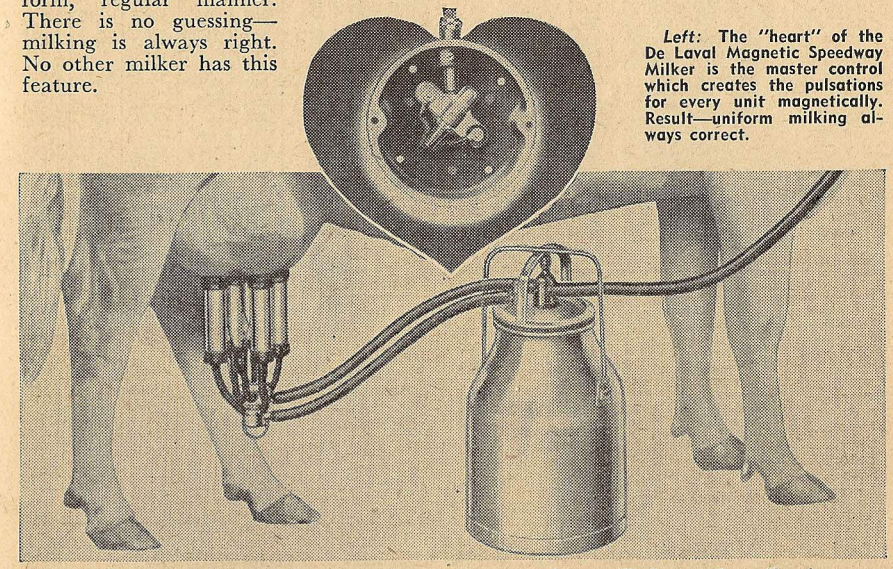
Other milkers require that the unit be hung on the cow, the harness adjusted to the cow and the unit adjusted on the harness. This opens up a wide range of guessing possibilities for the operator. And everyone knows that in any guessing contest many more wrong guesses will be made than right guesses.

Wrong guessing in making milking machine adjustments means loss of milk production and profits. It may also mean damage to udders. Certainly regular, uniform milking is a practical impossibility and the cows are milked differently from milking to milking.

That's why the De Laval Magnetic Speedway Milker has been so outstandingly successful as the milker which gets highest milk production and keeps udders sound and healthy. There are *no adjustments*. Every cow is always milked in the same uniform, regular manner. There is no guessing—milking is always right. No other milker has this feature.



Here is a suspended type of milker De Laval developed and tested in 1912. It milked cows, of course, but was discarded by De Laval because its very nature required various adjustments which made its use a guessing contest. Furthermore, it required more time to use and had other serious disadvantages.



Left: **The "heart" of the De Laval Magnetic Speedway Milker is the master control which creates the pulsations for every unit magnetically. Result—uniform milking always correct.**

Don't depend on guessing—know that your cows are always milked correctly, uniformly and regularly with the non-adjustable, tamper-proof, fast-handling De Laval Magnetic Speedway Milker.



ANIMAL TABLES

FOR EVERYDAY FARM USE

Here are three tables of important information needed by every farmer. To be sure—refer to these tables.

GESTATION TABLE

	Average Gestation Period Weeks or Days		Extremes (days)
Sow.....	16	112	109 to 120
Ewe....	22	150	146 to 157
Cow....	40½	283	240 to 311
Mare...	48½	340	307 to 412

Date of Service	Date Animal Due to Give Birth			
	Mare	Cow	Ewe	Sow
Jan. 1	Dec. 7	Oct. 11	May 31	Apr. 25
Jan. 11	Dec. 17	Oct. 21	June 10	May 5
Jan. 21	Dec. 27	Oct. 31	June 20	May 15
Jan. 31	Jan. 6	Nov. 10	June 30	May 25
Feb. 10	Jan. 16	Nov. 20	July 10	June 4
Feb. 20	Jan. 26	Nov. 30	July 20	June 14
Mar. 2	Feb. 5	Dec. 10	July 30	June 24
Mar. 12	Feb. 15	Dec. 20	Aug. 9	July 4
Mar. 22	Feb. 25	Dec. 30	Aug. 19	July 14
Apr. 1	Mar. 7	Jan. 9	Aug. 29	July 24
Apr. 11	Mar. 17	Jan. 19	Sept. 8	Aug. 3
Apr. 21	Mar. 27	Jan. 29	Sept. 18	Aug. 13
May 1	Apr. 6	Feb. 8	Sept. 28	Aug. 23
May 11	Apr. 16	Feb. 18	Oct. 8	Sept. 2
May 21	Apr. 26	Feb. 28	Oct. 18	Sept. 12
May 31	May 6	Mar. 10	Oct. 28	Sept. 22
June 10	May 16	Mar. 20	Nov. 7	Oct. 2
June 20	May 26	Mar. 30	Nov. 17	Oct. 12
June 30	June 5	Apr. 9	Nov. 27	Oct. 22
July 10	June 15	Apr. 19	Dec. 7	Nov. 1
July 20	June 25	Apr. 29	Dec. 17	Nov. 11
July 30	July 5	May 9	Dec. 27	Nov. 21
Aug. 9	July 15	May 19	Jan. 6	Dec. 1
Aug. 19	July 25	May 29	Jan. 16	Dec. 11
Aug. 29	Aug. 4	June 8	Jan. 26	Dec. 21
Sept. 8	Aug. 14	June 18	Feb. 5	Dec. 31
Sept. 18	Aug. 24	June 28	Feb. 15	Jan. 10
Sept. 28	Sept. 3	July 8	Feb. 25	Jan. 20
Oct. 8	Sept. 13	July 18	Mar. 7	Jan. 30
Oct. 18	Sept. 23	July 28	Mar. 17	Feb. 9
Oct. 28	Oct. 3	Aug. 7	Mar. 27	Feb. 19
Nov. 7	Oct. 13	Aug. 17	Apr. 6	Mar. 1
Nov. 17	Oct. 23	Aug. 27	Apr. 16	Mar. 11
Nov. 27	Nov. 2	Sept. 6	Apr. 26	Mar. 21
Dec. 7	Nov. 12	Sept. 16	May 6	Mar. 31
Dec. 17	Nov. 22	Sept. 26	May 16	Apr. 10
Dec. 27	Dec. 2	Oct. 6	May 26	Apr. 20

Duration and frequency of heat in farm animals in regular condition

	In heat for	If not impregnated heat will recur in
Mares.....	5-7 days*	3 to 6 weeks
Cows.....	2-3 days*	3 to 4 weeks
Ewes.....	2-3 days	17 to 28 days
Sows.....	2-4 days	21 days

*Subject to variation.

NORMAL RECTAL TEMPERATURES OF FARM ANIMALS

Animal	TEMPERATURE			
	Average		Range	
	Degrees F.	Degrees C.	Degrees F.	Degrees C.
Stallion	99.7	37.6	99.0–100.6	37.2–38.1
Mare	100.0	37.8	99.1–100.8	37.3–38.2
Beef cow	101.0	38.3	98.0–102.4	36.7–39.1
Dairy cow	101.5	38.6	100.4–102.8	38.0–39.3
Sheep	102.3	39.1	100.9–103.8	38.3–39.9
Goat	103.8	39.9	101.7–105.3	38.7–40.7
Pig	102.5	39.2	101.6–103.6	38.7–39.8
Dog	101.5	38.6	100.5–102.5	38.1–39.2
Cat	101.5	38.6	100.5–102.5	38.1–39.2
Rabbit	103.1	39.5	101.5–104.2	38.6–40.1
Chicken (Daylight)	107.1	41.7	105.0–109.4	40.6–43.0

Estimating the Weights of Dairy Cows From Heart-Girth Measurements

Heart-girth	Weight	Heart-girth	Weight	Heart-girth	Weight	Heart-girth	Weight
In.	Lbs.	In.	Lbs.	In.	Lbs.	In.	Lbs.
26	80	42½	248	59½	622	76½	1,263
26½	82	43	257	60	637	77	1,285
27	84	43½	266	60½	652	77½	1,308
27½	86	44	275	61	668	78	1,331
28	89	44½	284	61½	684	78½	1,354
28½	92	45	294	62	700	79	1,377
29	95	45½	304	62½	716	79½	1,400
29½	98	46	314	63	732	80	1,423
30	101	46½	324	63½	749	80½	1,446
30½	104	47	334	64	766	81	1,469
31	108	47½	344	64½	783	81½	1,492
31½	113	48	354	65	800	82	1,515
32	118	48½	364	65½	817	82½	1,538
32½	123	49	374	66	835	83	1,561
33	128	49½	384	66½	853	83½	1,584
33½	133	50	394	67	871	84	1,607
34	138	50½	404	67½	889	84½	1,630
34½	143	51	414	68	908	85	1,653
35	148	51½	424	68½	927	85½	1,676
35½	153	52	434	69	947	86	1,699
36	158	52½	445	69½	967	86½	1,722
36½	163	53	456	70	987	87	1,745
37	168	53½	467	70½	1,007	87½	1,768
37½	174	54	478	71	1,027	88	1,791
38	180	54½	489	71½	1,048	88½	1,814
38½	186	55	501	72	1,069	89	1,837
39	192	55½	513	72½	1,090	89½	1,860
39½	200	56	526	73	1,111	90	1,883
40	208	56½	539	73½	1,132	90½	1,906
40½	216	57	552	74	1,153	91	1,929
41	224	57½	565	74½	1,175	91½	1,952
41½	232	58	579	75	1,197	92	1,975
42	240	58½	593	75½	1,219	.....	.....
.....	.....	59	607	76	1,241	.....	.....

Depend on Your Veterinarian's Professional Training and Skill.

A CLEAN SEPARATOR

IN TWO MINUTES!



Because of modern design you can clean your De Laval Separator thoroughly and easily in two minutes with the use of the new compounds known as *wetting agents*. They are now available at grocery stores under various trade names such as Dreft, Swerl, Vel and others.



1. Place one tablespoonful of wetting agent in supply can.

2. Pour pailful of warm (120°) water into supply can.



3. Pour solution which has run through separator into dishpan.



4. Brush discs if necessary—pump water between them with brush.

5. Inspect discs—then place them in dishpan.

6. Brush remaining bowl parts—no scouring required.

7. Rinse with hot water, drain supply can and allow to dry.







NOVEMBER, 1948

Thirty Days — Eleventh Month

MOON'S PHASES, E. S. T.

- ● N. Moon, 1st, 1:02 A.M.
- ☽ F. Quar., 8th, 11:46 A.M.
- ○ F. Moon, 16th, 1:31 P.M.
- ☾ L. Quar., 23rd, 4:22 P.M.
- ● N. Moon, 30th, 1:44 P.M.

Days of Month	Days of Week	HISTORICAL EVENTS	Moon's Place	LATITUDE of Northern States: Sun rises H. M.	Sun sets H. M.	Moon sets H. M.	Sun Fast	LATITUDE of Southern States: Sun rises H. M.	Sun sets H. M.	Moon sets H. M.
1	Mo	McClellan in U.S. command, 1861	♒	6 32	4 54	sets	16	6 16	5 10	sets
2	Tu	So. Dakota admitted to Union, 1889	♒	6 33	4 53	5 42	16	6 17	5 09	6 10
3	We	France ceded Louisiana to Spain, 1762	♏	6 35	4 52	6 21	16	6 18	5 08	6 55
4	Th	1st Erie Canal Boat arr. N.Y., 1825	♏	6 36	4 50	7 10	16	6 19	5 07	7 46
5	Fr	Russian advance in Galacia, 1914	♐	6 38	4 49	8 06	16	6 20	5 07	8 42
6	Sa	1st U.S. mission church in China, 1847	♐	6 39	4 48	9 06	16	6 21	5 06	9 41
		24th Sunday after Trinity — Day's Length: Northern 10.06; Southern 10.43								
7	Su	Amer. forces landed in N. Africa, 1942	♑	6 40	4 46	10 10	16	6 22	5 05	10 41
8	Mo	Montana admitted to Union, 1889	♑	6 41	4 45	11 15	16	6 23	5 04	11 40
9	Tu	German emperor abdicated, 1918	♒	6 42	4 44	morn	16	6 24	5 04	morn
10	We	Tornado in Northwest, 1915	♒	6 44	4 43	0 19	16	6 25	5 03	0 36
11	Th	Pilgrims signed govt. compact, 1620	♒	6 45	4 42	1 21	16	6 26	5 02	1 32
12	Fr	Steamer "Vostris" sunk, 1928	♓	6 46	4 41	2 23	16	6 27	5 01	2 27
13	Sa	Hol. Tun. opened; N.Y. to N.J., 1927	♓	6 48	4 40	3 24	16	6 28	5 01	3 22
		25th Sunday after Trinity — Day's Length: Northern 9.50; Southern 10.31								
14	Su	Fed. Res. System inaugurated, 1914	♓	6 49	4 39	4 27	15	6 29	5 00	4 18
15	Mo	King of Brazil, dethroned, 1889	♈	6 50	4 38	5 32	15	6 30	4 59	5 17
16	Tu	Battle of Campbell Station, 1863	♈	6 51	4 37	rises	15	6 30	4 59	rises
17	We	Russians invaded Prussia, 1914	♉	6 53	4 36	5 04	15	6 31	4 58	5 36
18	Th	Stand. time adopted in U. S., 1883	♉	6 54	4 35	5 47	15	6 32	4 58	6 23
19	Fr	Lincoln at Gettysburg, 1863	♊	6 55	4 34	6 40	14	6 33	4 57	7 16
20	Sa	Filipino division in U.S. Army, 1918	♊	6 57	4 34	7 45	14	6 34	4 57	8 21
		26th Sunday after Trinity — Day's Length: Northern 9.35; Southern 10.22								
21	Su	German fleet surrendered, 1918	♋	6 58	4 33	8 56	14	6 35	4 57	9 28
22	Mo	1st Protestant Church in Ind., 1798	♋	6 59	4 32	10 13	14	6 36	4 56	10 38
23	Tu	Rumania joins the Axis Powers, 1940	♌	7 00	4 31	11 30	13	6 36	4 56	11 47
24	We	Queen Marie left United States, 1926	♌	7 02	4 31	morn	13	6 37	4 56	morn
25	Th	John Armstrong born, 1758	♌	7 03	4 30	0 46	13	6 38	4 55	0 55
26	Fr	1st natural color movie shown, 1922	♍	7 04	4 30	2 02	13	6 39	4 55	2 02
27	Sa	Andean Bound. dispute settled, 1902	♍	7 05	4 29	3 14	12	6 40	4 55	3 09
		Advent Sunday — Day's Length: Northern 9.23; Southern 10.13								
28	Su	Magellan entered the Pacific, 1520	♎	7 06	4 29	4 30	12	6 41	4 54	4 16
29	Mo	Battle of Knoxville, 1863	♎	7 07	4 28	5 46	12	6 42	4 54	5 24
30	Tu	Soviet troops invade Finland, 1939	♏	7 08	4 28	sets	11	6 43	4 54	sets

WEATHER FORECAST

Northeast: 1-3, rainy period; 4-8, clearing, strong winds; 9-12, turning colder; 13-16, unpleasant; 17-22, fair, a little warmer; 23-27, seasonal weather; 28-30, pleasant.

Southeast: 1-5, unsettled; 6-9, light winds, possible rain; 10-13, much cooler, some fog; 14-17, variable; 18-21, high winds; 22-26, continued cool; 27-30, turning pleasant.

Northwest: 1-4, local showers, cloudy; 5-8, clearing, turning colder; 9-14, continued cold; 15-18, threatening; 19-22, sleet storm expected; 23-26, variable; 27-30, strong winds.

Southwest: 1-3, generally unsettled; 4-7, local rain storms; 8-12, clearing; 13-17, colder, dull weather; 18-21, turning much colder; 22-25, storm wave; 26-30, turning pleasant.

SATISFIED USERS—Proved performance is your best guide in selecting a milker for your herd. Thousands of satisfied De Laval Milker users offer abundant evidence of De Laval Milker superiority. Ask a friend or neighbor.

IMPROVE YOUR MILKING



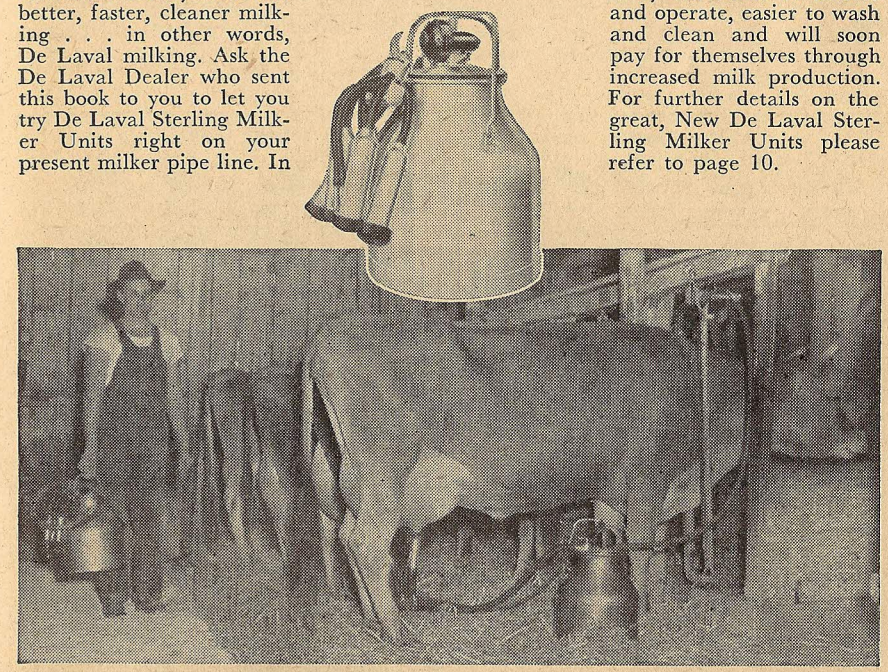
WITH DE LAVAL STERLING UNITS

Here is an inexpensive way to step up your milking for all-around better results. Use De Laval Sterling Milker Units in connection with your present milker pump and pipe line. Better results at once at small cost.

During the war years any machine that would milk cows at all was eagerly sought after by dairymen who if they could not get the milker they wanted took anything else available in order to get their cows milked. Perhaps you are using a milker which you realize is not doing the kind of milking job that gets the best results, still this milker has shown you the great time and labor saving possibilities that a milking machine provides.

Here is a quick, easy and inexpensive way for you to improve your milking results immediately to obtain better, faster, cleaner milking . . . in other words, De Laval milking. Ask the De Laval Dealer who sent this book to you to let you try De Laval Sterling Milker Units right on your present milker pipe line. In this way you use your present milker pump, stall cocks, pipe line and other equipment but receive all the advantages of De Laval Better Milking which the wonderful new single or double stainless steel units make possible. Compare milking results with those that you have been obtaining with your present milker units. The difference will be so great that you will never again be satisfied with mediocre milking.

De Laval Sterling Milker Units will produce more and cleaner milk for you. They are easier to handle and operate, easier to wash and clean and will soon pay for themselves through increased milk production. For further details on the great, New De Laval Sterling Milker Units please refer to page 10.



Mr. John E. Lindow, Independence, Ore., with his World's Champion cow, Volunteer Noble Alice, milked with the De Laval Sterling Milker and now World's Champion fat producer among all Jersey Junior two-year-olds. Mr. Lindow knows the value of the better milking provided by his De Laval Sterling Milker.



LIVE AND DRESSED WEIGHTS

FOR HOGS AND CATTLE

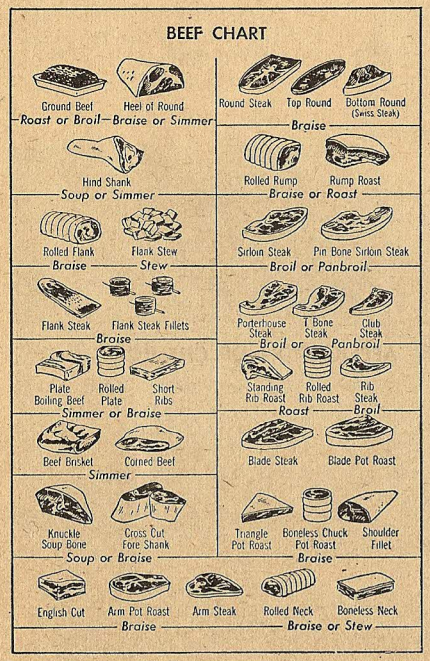
For your convenience at butchering time here is a handy table you will want for quick, accurate reference.

Dressing Percentages

		Per Cent
Cattle		
Thin cattle (dairy cows)		40–50
Barely warmed steers		50–55
Good conditioned steers		55–60
Prime cattle–long fed steers		60 up
Average for cattle		55
Hogs (Chilled Carcass)		
Prime heavy hogs	350–400 lbs.	82–84
Heavy butchers	280–350 lbs.	80–82
Medium butchers	220–280 lbs.	78–80
Light butchers	180–220 lbs.	77–79
Heavy packing	300–500 lbs.	81–83
Medium packing	250–300 lbs.	79–80
Light packing	200–280 lbs.	77–78
Bacon hogs	160–220 lbs.	76–77
Light mixed	150–220 lbs.	75–76
Extra light	125–150 lbs.	74–75
Shipper hogs	100–200 lbs.	72–76
Sheep		
Wide range		40–65
Average lambs		48–52

Average Dressing 1200 Lb. Steer

		Per Cent
Live weight	1200 lbs.	
Carcass	700 lbs.	58.3
Hide	75 lbs.	6.2
Head, feet, knees	45 lbs.	3.7
Oleo fat	80 lbs.	6.6
Liver	12 lbs.	1.0
Heart	3 lbs.	0.25
Lungs	20 lbs.	1.6
Tongue	5 lbs.	0.41
Cheek meat	5 lbs.	0.41
Rough tallow and entrails	84 lbs.	7.0
Liquid blood	46 lbs.	3.8
Paunch and contents	106 lbs.	8.8
Lips and weasand meat	4 lbs.	0.3
Tail, bung, casings	15 lbs.	1.2
		99.57





WEED KILLERS

FROM THE LABORATORY

The wide discussion of the new weed killer, 2, 4-D, has turned attention to the use of chemicals to eradicate weeds. A brief review of chemical weed killers may be informative.

Chemical weed killers are useful mainly for destroying small patches of dangerous perennial weeds, for heavy annual weeds in grainfields, for killing noxious weeds like poison ivy and for the care of lawns, golf courses, etc.

Because of cost and other factors, chemicals cannot yet replace tillage, pasturing or cropping in general farm weed control. But used for specific purposes, these chemicals are extremely valuable.

CHEMICALS COMMONLY USED

Sodium Chlorate. This powerful poison will kill all kinds of vegetation. It must be handled carefully since it becomes explosively inflammable when mixed with organic materials. It is not toxic to animals under normal conditions. For deep rooted perennial weeds it may be applied at the rate of 400 pounds per acre. Annual weeds are usually treated with 100 pounds per acre.

Sodium Arsenite and other soluble arsenicals are potent plant poisons. They are also poisonous to animals and men and should be applied carefully. In strong solutions they will make soil sterile for 2 to 5 years. In weak solutions they will kill annual weeds, or perennial weeds by repeated application.

Carbon Disulfide has been used in the Western States to kill deep rooted weeds. It is placed in holes and the chemical fumes destroy weed roots.

2, 4-Dichlorophenoxyacetic Acid (more easily called 2, 4-D) has been widely hailed because it is the first selective weed killer. All of its possibilities and limitations have not been fully explored. But it does kill many weeds, while not permanently harming grasses and some weeds.

The manufacturer's directions for use should be followed. Weeds should be sprayed when in vigorous growth and should be wet uniformly. However, a very small amount of 2, 4-D may kill, so care must be taken not to spray vegetables, flowers, ornamental shrubs, etc.

2, 4-D kills many "tough" weeds, in addition to dandelion, plantain, bindweed, peavine, nettles, etc. Highly resistant to it are the grass weeds such as quackgrass, Johnson grass, etc. Its action on many other weeds is still in doubt.

Most grain and grass crops appear to resist 2, 4-D although they may be retarded by it at some stages. Corn may be killed if treated just before tasseling but is not harmed at other times. Legumes and vegetables may be killed by small applications.

Other Chemicals. Iron Sulphate is frequently used to destroy broad-leaved perennial weeds, applied at the rate of 75 to 100 pounds in 50 gallons of water to the acre. Common salt is the oldest weed killing chemical and is still used, frequently with pasturage. Some chemical fertilizers, such as ammonium sulphate and ammonium phosphate help to control weeds by increasing soil acidity. They are used mainly on lawns and golf courses.



APPLICATION OF CHEMICALS

Most chemicals are best applied in solution. Dry chemicals may be mixed with water. Applying as a liquid with a power or hand sprayer gives more even distribution and is less likely to injure soil areas. Spray equipment used for 2, 4-D should not be used for insecticide or other crop sprays.

Before using any chemical weed killers in extensive applications it would be wise to consult the nearest Experimental Station, Agricultural College or other available authority.



INTERESTING GAMES

TO LIVEN UP DULL EVENINGS

There comes a time in every informal evening when no one seems to know just what to do or say. That's the time to say "Let's play a game!" The games explained below require no special equipment or skill. Remember where to look for games to play when next you have a party.

TELEGRAPH OFFICE

Each player is given paper and pencil. All are seated in a circle around a table, or are given a board or book on which to write. They are then told to put down any ten letters of the alphabet at the top of the sheet. No letter may be used twice. Each player then passes his paper to the player on his left.

Each one must now make up a ten word message beginning each word with the letters written at the top of the sheet received and in the same order. For instance, A N H M L T S B F Q might be made into, "Aunt Nellie Has Mumps Looks Too Swell But Feels Queer".

When all messages are written, they are signed and all are read aloud by one person. Needless to say, they will cause plenty of laughter.

FAST FRUIT

Choose two or three teams of three persons each, by lot, by cutting cards, or in any way you like. Place the teams on chairs, side by side. Give each team an apple and a knife. Then tell them that the first one on each team is to peel the apple, the second to cut it in quarters and core it, and the third to eat it. Give a starting signal and award some funny prize, if you can, to the team finishing first. Any fruit that must be peeled may be used.

GHOST STORY

Arrange the players in a circle and place a candle before each. Each candle has previously been cut and the sections stuck together again with melted wax. Thus each candle will burn out in a varying length of time, from three to fifteen minutes. You can try a candle before the game to see how long it will burn. Now select one of the players, turn all other lights out and light his candle. He is to begin to tell any story he thinks of at once. As soon as his candle goes out the player on his left must light his candle and continue the same story, and so on until all the candles are burned. This is amusing because no one knows how long he must talk.

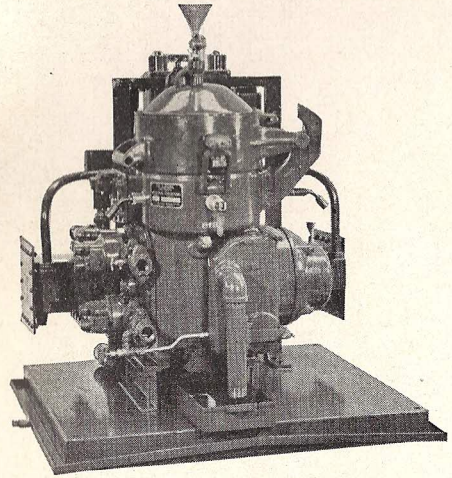
MR. WEBSTER

Ten letters of the alphabet are selected by chance. One way of doing this is to take children's alphabet blocks, jumble them up and then take the letters on top. Each player is given a sheet of paper and a pencil. The ten letters selected are written at the top of the sheets. Each player then tries to see how many words can be written down which contain only the letters selected. A time limit is set, say five minutes. At the end of that time the papers are collected and the person who has written the most words wins. Several games may be played and the winner selected by point score. One point is awarded for each correct word and two points deducted for each incorrect word. The person having the largest score at the end of a predetermined number of games becomes "Mr. Webster" for the rest of the evening. Have a good dictionary handy to settle arguments.

CHAMPION SMELLER

A few guests who claim to have a strong sense of smell are selected. Ten or a dozen cups or glasses, each containing a small quantity of some liquid commonly used or well known in the average home, are required for the game. Water, tea, coffee, milk, ginger ale, vinegar, olive oil, vanilla, ammonia, turpentine are liquids that may be used. Each player is then blindfolded, in turn, and asked to name the contents of each cup or glass, identifying them solely by his sense of smell, within ten seconds. The winner is, of course, the person guessing the largest number of liquids correctly.

DE LAVAL CENTRIFUGALS SERVE MANY INDUSTRIES



De Laval Industrial Centrifugals operate on the same basic principle as the Dairy models, but differ somewhat in appearance. Shown here is the famous De Laval "Uni-Matic", which combines centrifugal Separator, pumps and heater, all compactly mounted on a single base. It is widely used to purify many different types of oil.

Partial list of major applications for De Laval Centrifugals:

IN THE POWER PLANT — STATIONARY AND MARINE:

Diesel Lubricating Oil
Transformer Oil
Turbine Lubricating Oil
Diesel Fuel Oil

IN METAL-WORKING PLANTS AND FACTORIES:

Cutting Oil
Grinding Coolant
Hydraulic Oil
Lubricating Oil
Motor Block Test Oil
Slushing Oil
Washing Oil

IN REFINERIES:

Bulk Oil
Oil Analyses
Crude Fuel Oil

IN MILLS:

Lubricating Oil
Rolling Mill Oil
Roll Coolant

IN PROCESSING PLANTS:

Fish Oil
Penicillin
Streptomycin
Varnish
Liver Oil
Vegetable Oil
Chemicals
Ink
Lacquer
Essential Oils
Fruit Juices
Yeast

DE LAVAL ..CLARIFIERS AND SEPARATORS.. SPEED UP INDUSTRIAL PROCESSES