

Aids Nature

The great success of Dr. Pierce's Golden Medical Discovery in curing weak stomachs, wasted bodies, weak lungs, and obstinate and lingering coughs, is based on the recognition of the fundamental truth that "Golden Medical Discovery" supplies Nature with body-building, tissue-repairing, muscle-making materials, in condensed and concentrated form. With this help Nature supplies the necessary strength to the stomach to digest food, build up the body and thereby throw off lingering, obstinate coughs. The "Discovery" re-establishes the digestive and nutritive organs in sound health, purifies and enriches the blood, and nourishes the nerves—in short establishes sound vigorous health.



If your dealer offers something "just as good," it is probably better FOR HIM—it pays better. But you are thinking of the cure not the profit, so there's nothing "just as good" for you. Say so.

Dr. Pierce's Common Sense Medical Adviser, In Plain English; or, Medicine Simplified, 1008 pages, over 700 illustrations, newly revised up-to-date Edition, cloth-bound, sent for 50 one-cent stamps, to cover cost of wrapping and mailing only. Address: Dr. R. V. Pierce, Buffalo, N. Y.

Farm Dairying



Jacobs Irene, Great Butter Cow

VI.—The Heifer and the Udder.

By LAURA ROSE,

Demonstrator and Lecturer in Dairying at the Ontario Agricultural College, Guelph, Canada.

[Copyright, 1911, by A. C. McClurg & Co.]

It pays in more ways than one to be on friendly terms with our animals. You must pet and talk to the young heifer so as to gain her confidence and affection.

Place her early with the herd of milk cows and watch that no harm befalls her. A sudden fright from a dog or an unusual sight may cause her to lose her calf.

Go through the process of milking her to accustom her to being handled. See that her calf is removed unknown to her twenty-four hours after birth. Go into the stall soon after the calf is taken away, groom and caress the young mother, and if she gets the idea that you are the baby so much the better for the milk pail.

The heifer's udder for a few days after calving is swollen and inflamed and often painful. She is nervous and excited. If you have been in the habit of handling her, she will allow you to gently rub her udder and draw a little milk. The relief thus given will further instil you in her affections and her last thought would be to lift a foot to kick you. The kicking cow is not born; she is made that way by the milker. It is a good plan to clip the long hair from the udder ground, the teats. When milking this hair is often caught with the teats and pulled, causing pain which makes the heifer kick.

To get gentle cows there is nothing like raising them yourself. The cow seems to partake of the disposition of her keeper. No dairymen can afford to have a man in his stable who is rough and quick tempered.

The First Calf.

If the heifer is thrifty and strong she may have her first calf from two to two and a half years old. If delayed, longer she is apt to acquire the habit of putting her food into flesh. It is well to delay the coming of the second calf for a few months longer than is usual in the mature cow. This gives the young heifer a better chance to develop, as there is not the extra tax on her during the heaviest flow of milk. It ought not to be necessary to dwell upon the point of feeding a heifer generously. She is as yet immature and must have plenty of good food to build up her own body as well as nourish the unborn calf.

Many farmers as soon as a cow becomes dry let her hunt her own living or half starve her, excusing their neglect by saying she is doing nothing for her board. Is she not preparing herself to work again every day for ten or eleven months, besides presenting her owner with a calf?

If you wish to establish a long milking propensity you must be persistent in milking the heifer after her first calf. It is then that the habit of a long or short milking period is formed. Dry her up at seven or eight months and it is difficult ever after to get her to milk for ten months. For this reason keep on milking her for ten or eleven months, no matter how little milk you may get.

It is better to have the heavy flow of milk in the winter, when prices are higher and help more plentiful. Cows coming in in November and December go on the grass just when there is a tendency to a falling off in the milk flow. The change to fresh pasture stimulates the secretion of milk, and it is like a second freshening.

Fall calving is better both for the cow and the calf. They receive better care and are not so exposed to extremes of weather. It must be remembered that a cow must not be neglected when dry. This is her building up period, and she should get plenty of good food and be in vigorous condition at freshening time.

The udder, the glandular organ in which the cow secretes her milk, is made up of arteries, veins, nerves,

tissue and fat. When cut, it has a soft, spongy, pale grayish pink appearance. There is a partition running lengthwise through the udder, dividing it into two distinct and unconnected parts. If a cow lose the use of one of her teats, the milk may be largely drawn from that quarter through the other teat on the same side, but if an accident happen to both teats on the same side, half of her usefulness as a milker is gone.

The birth of the young is the primary incentive to the secretion of milk by all animals which suckle their young. In the wild animals and in the scrub cow the udder is small and imperfectly developed, and secretes only for a few months. Intelligent feeding, selection and breeding have resulted in an enormous development of udder and an almost continuous milking period in the best cows.

The Secretion of Milk.

There are two general theories advanced in regard to the secretion of milk. The metamorphic (meaning change of form) claims that the milk is due to a breaking down of the cell structure of the udder. We can hardly accept this, for it would be almost impossible for a cow to build up and break down the cells to the extent of as high as from 50 to 100 pounds of milk per day.

The transudation or filtering theory claims that the milk filters or oozes through the tissues from the blood as it courses through the udder. Neither can this explanation be wholly true, for constituents found in milk are almost lacking in blood-fat, for example.

A combination of these two theories appears reasonable. As the blood courses through the udder from it are taken substances to build up thousands and thousands of tiny cells stored with materials which afterward form the greater portion of the solid constituents of the milk. All day long these cells keep developing, and the udder grows larger and larger. The blood is charged with an extra supply of water.

The cow has now the materials in readiness to make the finished product, milk. We have provided her with food and water. With these she has carried on the manufacturing process to a certain point, but she needs some outward assistance to finish the work thoroughly. She gets this assistance from the calf when it presses the teat in its mouth or from us when we likewise squeeze it in our hands.

We place our hands on the teats thinking we do so in order merely to draw the milk, but we do much more than that. We are co-workers with the cow in helping her to make the milk, and the better we understand our part of the business the larger will be the returns.

Action of the Nerves.

The materials for the milk are stored in the cells of the udder and in the blood. Its final secretion is brought about by the action of the nerves; hence the great importance of the nervous constitution. If a cow were giving ten quarts of milk at a milking and she were killed just before, being milked there would not be found in her udder or any other part of her body more than a quart of milk. Too much stress cannot be laid upon this fact that the making of the milk is largely completed just at the time of milking.

Intelligence and kindness on the part of the milker at this time determine to a great extent not only the quantity but also the quality of the milk. When we press the teats we excite the fine network nerves in the udder.



UDDER OF JACOBS IRENE—SHE PRODUCED MORE THAN HER OWN WEIGHT IN BUTTER IN A YEAR.

These nerves act on the cells, breaking them down. At the same time the water filters through the tissues, carrying with it the mineral matter from

the blood. The materials from the broken down cells and the water unite to form milk, which finds its way through the minute channels to the milk cistern at the top of the teat, whence the milk is drawn by the downward pressure of the hand on the teat through the teat canal and escapes. It takes the fat globules longer to get to the outlet, hence the reason for the richness of the last milk drawn.

Milk is a product which is subject to remarkable changes while in the body of the animal secreting it. Intense pain, fright, anger, all leave their traces in the milk. In the human mother the first two of these have been to infuse the milk with poison and to cause convulsions, and sometimes the death of the nursing baby. It is reasonable to suppose that what is true of the human family applies more or less to such a highly developed, sensitive animal as the dairy cow.

Some cows leak their milk. This is due to the muscle at the teat opening being too lax. It may be remedied by a rather risky operation. Other cows are very hard to milk, the muscle being too tight. Remedies are given for this defect also. The flow of milk is usually greater in the morning and the percentage of fat slightly lower than at the evening milking.

A CLEAR HEALTHY SKIN.—Eruptions of the skin and the blotches which bluish beauty are the result of impure blood caused by unhealthy action of the liver and kidneys. In correcting this unhealthy action and restoring the organs to their normal condition, Parmentier's Vegetable Pills will at the same time cleanse the blood, and the blotches and eruptions will disappear without leaving any trace.

MEDICAL.

JAMES NEWELL, PH. B., M. D.
L. R. C. P., M. B., M. A., England
Watford, Ont.

OFFICE—Main St., next door to Merchants Bank, Toronto—Fruit street, one block east from Main street.

R. G. KELLY, M. D.

Watford, Ont.

OFFICE—MAIN STREET, formerly occupied by Dr. McLeod, Residence Front St. East.

THOS. A. BRANDON, M. D., WATFORD, ONT.

FORMERLY OF SARINIA GENERAL HOSPITAL—2nd Ward Hospital of Toronto. Office—Main Street, in office formerly occupied by Dr. Gibson

CIVIL ENGINEER.

W. M. MANIGAUULT,
ONTARIO LAND SURVEYOR
AND CIVIL ENGINEER,
Box 800, STRATHROY, ONTARIO

DENTAL.

GEORGE HICKS,

D.D.S., TRINITY UNIVERSITY, L.D.S., ROYAL College of Dental Surgeons, Post graduate in Bridge and Crown work, Orthodontia and Porcelain work. The best methods employed to preserve the natural teeth. OFFICE—Over Thompson's Confectionery, MAIN ST., Watford. At Queen's Hotel, Toronto, 1st and 3rd Thursdays each month.

G. N. HOWDEN,

D.D.S., L.D.S.

GRADUATE of the Royal College of Dental Surgeons, Ontario, and of the University of Toronto. Only the Latest and Most Approved Appliances and Methods used. Special adaptation to Crown Bridge Work. Office—Over Dr. Kelly's Surgery, MAIN STREET, WATFORD

Veterinary Surgeon.

J. MCGILLICUDDY

Veterinary Surgeon,

HONOR GRADUATE ONTARIO VETERINARY College, Dentistry a Specialty. All diseases of domestic Animals treated on scientific principles. Office—One door south of the Guide-Advocate office. Residence—Main St., one door north of Dr. Gibson's office.

Auctioneer

J. F. ELLIOT.

Licensed Auctioneer.
(For the County of Lambton.)

PROMPT attention to all orders, reasonable terms. Orders may be left at the Guide-Advocate office

INSURANCE

J. H. HUME.

AGENT FOR FIRE, ACCIDENT AND SICK BENEFIT COMPANIES.

REPRESENTING Five Old and Reliable Fire Insurance Companies

If you want your property insured please call on J. H. HUME and get his rates.

—ALSO AGENT FOR—

C. P. R. Telegraph and Canada Permanent Loan and Saving Co.
Ticket Agent For C. P. R.—Tickets sold to all points in Manitoba, Northwest and British Columbia.

Watford Flour Mills

We have the following brands of Flour always in stock and can give you close prices on any quantity.

SUNRISE, First Patent from Manitoba wheat			
FIVE ROSE do do do	do	do	do
ROYAL HOUSEHOLD do do do	do	do	do
HORTON do do do	do	do	do
HARVEST QUEEN, 2nd Pat. from Man. wheat			
GOLD DUST do do do	do	do	do
RED ROSE, High Grade Blended Flour			
NEW ERA, Special Pastry Flour			

Get our Prices. They will surprise you. Telephone or leave your order. It will receive prompt attention.

C. B. MATTHEWS & SON.

MILLERS AND FEED MERCHANTS

TRENOUTH & CO.

DEALERS IN:

Flour, Oat Meal, Corn Meal, Wheat Kernells, Flaked Wheat and Barley. All Kinds of Feed, Grain, Seeds and Poultry Food

We carry the following makes of Flour, which are giving the BEST OF SATISFACTION:

Five Roses, Harvest Queen, Mitchell's Best,

All made from MANITOBA WHEAT.

Mitchell's Pride of the West, a Blended Flour.

Lambert & Son's Gold Dust, a Blended Flour.

Mustard & Son's Eldorado, a Blended Flour.

Pastry Flour, Low Grade Flour, Bran and Shorts

made by the above named millers and at close prices.

Tinsmithing of All Kinds

We have secured the services of Mr. C. H. Butler who thoroughly understands Heating and Plumbing and will be glad to furnish estimates on anything in this line.

Revetroughing and Job Work Solicited

The N. B. Howden Est.

COAL—GENUINE SCRANTON—COAL

Has stood the test of many years, stood the test because it was made right by nature and is prepared right by the miner. It is a favorite because of its Clean Burning and Wonderful Lasting Qualities. If you have been its friend you will still be its friend. If you are not a customer, we invite you to become one, and would like to quote you our prices.

Planing Mill Runs Day and Night

We have the best mill in the county and the best mechanics too. Our Policy—"Fair Treatment to All"

Lumber, Cedar and Metallic Shingles, Roofing, Lime, Hair, etc.

Chopping.

Electric Light.

GEO. CHAMBERS.

Established 1870.

RECEIVED
ed s to it out bother house portably r. We shine" igh to cker r
y's
ODDS.
RK S
stones, Granite) ildings.
Designs
d Save s.
to have see us. personal service.
TONE.
AKERY
EAM
SODA
SUNDAE
RUM
DRINKS
lectionery
Choice
ce
KERY.
S.
CM.
IER OF
ERS
nted 1879
ord, Ont.
um Cost.
per 1000.
nd paid 150-
each last
31, 1911.
6,609,249.06
245,683.45
1,854,932.49
2,000.
Watford
nday in each
is invited.
Hume, R. Sec.
ger.