**Don't Offer a Reward**

For your lost appetite. All know that it is a valuable piece of personal property, but why go to the expense when Hostetter's Stomach Bitters will restore it to you. A course of that unparalleled tonic and corrective not only induces a return of the relish for food, but confers upon the stomach the power to gratify appetite without unpleasant sensations afterward. For the purpose of quickening digestion, arousing a dormant liver or kidneys, and establishing a regularity of the bowels, no medicine can exceed this genial family cordial, in which the pure alcoholic principle is modified by blending with it botanic elements of the highest efficacy. Avoid the fiery unalloyed stimulants of commerce as a means of overcoming inactivity of any of the organs above mentioned, and use, instead, the Bitters. This professionally sanctioned medicine remedies malarial and rheumatic ailments.

THE finest floors are said to be seen in Russia. For those of the highest grade tropical woods are exclusively employed. Fir and pine are never used, as in consequence of their sticky character they attract and retain dust and dirt, and thereby soon become blackened. Pitch pine, too, is liable to shrink, even after being well seasoned. The mosaic wood floors in Russia are of extraordinary beauty.

The sweetest apples makes the sourest cider.

**Hood's Is the Best**

Fall Medicine, because it purifies, vitalizes and enriches the blood, and therefore gives strength to resist bad effects from Colds, Catarrh, Rheumatism, Pneumonia, Malaria, the Grip, etc. Take it now and avoid the danger of serious illness. It may save you many dollars in doctors' bills. Be sure to get Hood's and only HOOD'S.

**Hood's Sarsaparilla Cures**

"I can truly recommend Hood's Sarsaparilla as an excellent medicine. I have taken four bottles and I am better than I have been for two years past. I was all run down, my limbs swelled and my blood was in a very bad condition. Now I am free from neuralgia and better in every way." MRS. H. COBLEIGH, Hume, N. Y.

**Hood's Pills** cure all liver ills, billiousness, jaundice, indigestion, sick headache. 25c.

**W. L. DOUGLAS $3 SHOE** IS THE BEST. NO SQUEAKING.

$5. CORDOVAN, FRENCH & ENAMELLED CALF. $4.$3.50 FINE CALF & KANGAROO. $3.50 POLICE, 3 SOLES. $2.50 $2. WORKINGMENS EXTRA FINE. $2. $1.75 BOYS' SCHOOL SHOES. LADIES. $3. $2.50 $2. $1.75 BEST DONGOLA. SEND FOR CATALOGUE. W. L. DOUGLAS, BROCKTON, MASS.

You can save money by wearing the W. L. Douglas $3.00 Shoe.

Because, we are the largest manufacturers of this grade of shoes in the world, and guarantee their value by stamping the name and price on the bottom, which protect you against high prices and the middleman's profits. Our shoes equal custom work in style, easy fitting and wearing qualities. We have them sold everywhere at lower prices for the value given than any other make. Take no substitute. If your dealer cannot supply you, we can.

**FREE!**

**THIS KNIFE!** Fine Steel. Keen as a razor. Good strong handle. Mailed free in exchange for 25 Large Lion Heads cut from Lion Coffee Wrappers, and a 2-cent stamp to pay postage. Write for list of our other fine Premiums. WOOLSON SPICE CO., 450 Huron St. TOLEDO O

ELY'S CREAM BALM CURES **CATARRH** PRICE 50 CENTS, ALL DRUGGISTS

**MAILED FREE** to any Farmer or Farmer's Wife "UP TO DATE DAIRYING" containing full instruction how to secure Higher Grade Products, make **MORE BUTTER** that will bring **BETTER PRICE** and with Less Labor get More Money. Reviewing and explaining in a practical manner . . . THE NORMANDY (FRENCH) SYSTEM, DANISH DAIRY SYSTEM AND ELGIN SEPARATOR SYSTEM which have brought prosperity and ease to the dairy farmer. Write for this Valuable Information. Mailed FREE on application. Kindly send address of neighboring farmers who own cows. Address R. LESPINASSE, Ex. Sec'y Columbian & Illinois Dairy Associations, 246 W. LAKE ST. CHICAGO

**CHEAP FARMS IN VIRGINIA.**

Good Farming Land on Railroads near good towns from $5.00 per acre up. Sure crops; no drought. Mild winters and summers. Close to Eastern markets. Cheap Round Trip Rates to go and look at lands. For list of lands and particulars address E. B. POPE, Western Pass'r Agt. C. & O. R. R. ST. LOUIS, MO.

**MY WIFE** CANNOT SEE HOW YOU DO IT AND PAY FREIGHT. $14 Buys our 2 drawer walnut or oak Improved High Arm Stagger-sewing machine finely finished, nickel plated, adapted to light and heavy work; guaranteed for 10 Years; with Automatic Bobbin Winder, Self-Threading Cylinder Shuttle, Self-Setting Needle and a complete set of Steel Attachments; shipped any where on 30 Day's Trial. No money required in advance. 75,000 now in use. World's Fair Medal awarded machine and attachments. Buy from factory and save dealer's and agent's profits. FREE Cut This Out and send to-day for machine or large free catalogue, testimonials and Glimpses of the World's Fair. OXFORD MFG. CO. 342 Wabash Ave. CHICAGO, ILL.

**WELL MACHINERY**

Illustrated catalogue showing WELL AUGERS, ROCK DRILLS, HYDRAULIC AND JETTING MACHINERY, etc. Sent Free. Have been tested and all warranted. Sioux City Engine & Iron Works, Successors to Peck Mfg. Co., Sioux City, Iowa. 1317 Union Ave., Kansas City, Mo.

PISO'S CURE FOR Consumptives and people who have weak lungs or Asthma, should use Piso's Cure for Consumption. It has cured thousands. It has not injured one. It is not bad to take. It is the best cough syrup. Sold everywhere. 25c. CONSUMPTION.

**PENSION** JOHN W. MORRIS, Washington, D. C. Successfully Prosecutes Claims. Late Principal Examiner U.S. Pension Bureau. 3 yrs in last war, 15 adjudicating claims, atty since.

**OMAHA Business Houses.**

OLD HATS Made new, no matter what condition they are in. NEB. HAT MF'G. CO., 207 North 17th St.

DON'T RUIN YOUR STOVES Write at once for STOVE REPAIRS Omaha Stove Repair Works, 1209 Douglas St. Omaha

TOYS Dolls, Games, Books, Notions, Fancy Goods, &c. Wholesale and retail. We pay expenses to Omaha. Write about it. H. HARDY & CO., 1319 Farnam St., Omaha, Neb.

CLOTHING for MEN and BOYS. If you want to save from $2 to $10 00 on a suit write for our new Fall Catalogue, containing samples of cloth. NEBRASKA CLOTHING CO., Cor. 15th and Douglas Sts., Omaha.

Cameras $2.50 "PHOTORET," Watch size, loaded for 36 views. Catalog free. Heyn Photo Supply Co., Exclusive Agents, 1215 Farnam St., Omaha. Everything in Photo Supplies for Professionals and Amateurs.

EDUCATIONAL.

Omaha Business College. SHORT HAND AND TYPE-WRITING. Oldest and Best Business College in the West. No vacation. Thousands of graduates and old students occupying paying positions. Write for catalogue. LILLIBRIDGE & ROOSE, Omaha, Neb.

# DAIRY AND POULTRY.

## INTERESTING CHAPTERS FOR OUR RURAL READERS.

**How Successful Farmers Operate This Department of the Homestead—Hints as to the Care of Live Stock and Poultry.**

### Source of the Butter Flavor.

Storr's experiment station bulletin has the following.

The butter aroma appears in the butter as the result of the ripening process. Sweet-cream butter does have this delicious flavor, and while there is a demand in our markets, perhaps a growing demand, for sweet-cream butter, it never develops the delicate flavor known as the butter aroma. During ripening, certain changes take place in the cream, some of which we understand, and others which are at present beyond the reach of chemical knowledge. The composition of cream is essentially the same as that of milk, except in the higher proportion of fat. It is made up chiefly of butter-fat in the form of globules, of caseïn in a partial suspension in the liquid, of milk-sugar in solution, and of a small amount of albumen, the form of an extremely delicate network of fibers which we call fibrin. Cream always contains a large number of bacteria, yeasts and molds, which are the active agents in ripening. The sources of these micro-organisms are varied. They are not present in the milk when secreted by a cow, but find their way into it in a variety of ways. Some come from the air, some from the hairs of the cow, some from the dust of the barn, some from the hands of the milker, some from the milk vessels, and others from other sources of contamination. The chances of contamination are sufficient to stock the milk with an abundance of these organisms under all circumstances. By the time the cream has reached the creamery it contains a quantity of organisms varying widely with temperature and other conditions, and it is to these that the subsequent ripening is due. During the period of ripening the organisms are growing and producing profound changes in the cream. Bacteria are primarily destructive agents. During their growth they are pulling to pieces some of the chemical compounds of the cream and reducing them to a condition of greater simplicity, giving rise to a greater number of so-called decomposition products. Chemistry has not yet explained all of these changes. A few of them we partially understand. We know that some of the organisms act upon milk-sugar, converting it into lactic acid, with the carbonic gas as a by product. We know, also, that sometimes butyric acid is produced, and that sometimes ferments similar to rennet and trypsin make their appearance in ripening cream. Alcohol is also a common product, so much so that the butter flavor has sometimes been attributed to this product alone.

### Dangers in Dairies.

A foreign exchange calls attention to the great danger that meets the milk consumer, when said milk is drawn from a large number of cows scattered over many farms, unless some rigid system of inspection be in vogue. Milk is known to be a good medium for the carrying of disease germs, and certain maladies are spread through whole communities in this way. If scarlet or typhoid fever, for instance, breaks out on a farm, from which milk is being shipped, there is great danger that the germs of those fevers will be carried to the factory, and thence scattered far and wide. Dr. Welply of England, writing on this point, says:

"Dairy farming has been partly revolutionized by the adoption of creameries, to which a number of farmers send their milk. The milk of all is there mixed together, the cream removed, and some of the mixed skim milk—known as separated milk—is then sent back to the farms. The common danger becomes evident as soon as attention is pointedly drawn to the fact that a group of dairies is thus placed in intimate relation with each other. The milk going out from one goes to all, and bears with it any impurity that it may have acquired at its original source. Instinctively, one thinks of the many diseases that may thus be scattered widely over a district, and pre-eminently of cholera, typhoid fever, scarlatina and diphtheria, epidemics of which have frequently been caused by infected milk, but such speculations may be said to be purely imaginary, without a practical example, and the power of supplying that proof is my reason for writing this article."

The evidence adduced appears to us, as aforesaid, to be incontestable. Adding the cases in the rural district to those investigated in a town, Dr. Welply found sixty-one cases of typhoid fever, every one of which was capable of being easily traced back to the imported one. Fifty-two contracted the disease directly through the creamery, and the remaining nine indirectly by means of food or milk from dairies which became infected secondarily. The opinion here expressed was fully confirmed by a medical officer of the local government board, who subsequently made an independent and exhaustive investigation. Wherever there is a creamery, Dr. Welply says, there should be a public inspector of the dairies that supply milk to it, and he quotes the rules in force in Denmark, of which two are as follows:

"If an infectious disease breaks out in the family or among the stock of a member, the member must immediately cease to deliver milk at the dairy until the disease has disappeared and his farm has been properly disinfected. In the event of sickness among the staff of the dairy, the dairyman shall have the sick person removed immediately, and the dairy must be disinfected. Any infringement of this clause shall be punished by a fine up to $25.

"It shall be the duty and right of the directorate and of the dairyman, whenever they think fit, to visit the members' farms, and to inspect the sheds, fodder lofts, and troughs, fields, milking sheds, etc., and the members must give them all necessary help and information. If it is afterward found out that a member has concealed anything or given false information, he shall be fined from 2s 3d to 11s per cow, and make good any loss or damage he may have occasioned."

### English Duck Farming.

The equipment of an English duck farm is very simple, says Dr. Frean. One or two wooden sheds, each with a run in front, are sufficient. The classification of the ducklings is determined by age. They are, accordingly, divided into "flocks" of one week old, two weeks old, and other ages. At a week old a flock of Aylesbury ducklings is an extremely pretty sight. Each bird is a little ball of yellow, fluffy down, furnished with a bill of delicate heliotrope color. The youngsters are very nimble, and keep together as they run up or down, or across their limited range, uttering continually the plaintive call which falls upon the ear almost like a plea for protection. As age advances, the feathers turn white and the bills grow paler. Very commonly the run is littered with straw, upon which the little creatures will peacefully nestle on a drowsy, sunny afternoon. As an example of economy in small things, it may be noted that the straw is periodically gathered up, shaken out elsewhere to dry and sweeten, and then strewn again upon the run or under the shed. In one case, where a large shed is used for the ducklings, the straw is taken out daily, and the mud floor swept, sprinkled with a weak solution of carbolic acid, and dusted with lime before the straw is put back again. Great care has to be exercised in keeping the ducklings healthy, and cleanliness is necessarily a first consideration. In the spring of the year, a duck rearer near Tring lost 1,000 ducklings, and attributes their untimely death to a species of louse, caught from the brood hens, he opines, fastening on the back of the neck. It will be understood that the young birds destined to be killed as ducklings are never allowed to roam at large, nor do they go on the water, the object being to reduce the wear and tear on the muscular tissue to a minimum, so that as much as possible of the food may be utilized in adding to the weight of flesh upon the bird. As the ducklings are never kept for breeding purposes, this somewhat unnatural mode of life can have no ill effects of an hereditary nature. Such water as the ducklings are allowed access to is supplied to them in small troughs or shallow vessels, and they use it for bathing and drinking purposes. The duck-rearers are very particular as to the kind of grit which is given in the drinking water. Where a large number of birds of the same age are kept together, it is usual, except when they come to the front to feed, to partition them off into small "flocks" of about 100 birds each. This is easily done by means of planks about one foot wide, set on edge, so as to divide the ground space into a number of rectangular areas. The object of this is to prevent the birds from overcrowding, and possibly killing the weaker ones by overlying. As the birds return from feeding they are successively partitioned off as fast as a sufficient number enter the shed. When the birds get larger with advancing age, it is found expedient to confine fewer in each pen—say two dozen or so.

SELECT the earliest hatched, largest and best formed turkeys for breeding purposes—securing a male not related to the females in a near degree. Keep the hens until seven or eight years old, or so long as they continue to lay well and keep their young are strong and vigorous. Keep the males until three or five years old, and the breeder will be well satisfied with the trial, says American Poultry Raiser. In selecting your foundation stock, discard all the various named colors, white, buff, yellow-mixed, slate or blue black, and keep only the original of the color of the progenitors of our domestic turkeys which is a black with a bronze or metallic tinge, the nearest to the color of a solid black the nearest are you to the shade of the true breed. The different off colors are nice pretty birds to keep for ornamental purposes. A black or nice white turkey is a beautiful sight on a well kept lawn of a retired gentleman farmer, but for practical use or for profit it is quite useless to bother with them.

BLACK fowls, though they dress white, are not easily denuded of the pin-feathers (that is, pin-feathers are more easily seen and noticed), and in some markets the color of the legs has much to do with the sales of the carcasses.

KEEP your chickens well supplied with bone meal and notice "what a difference in the morning" there will be in your egg crop.

### A Lover of Poultry.

Keeping poultry teaches love in its broadest sense. It compels man to love his home, to watch the little matters, to be regular, to be frugal, to be industrious, says Homestead. All these go to make up a happy life, and to be in love with that which is dear to him. It is an old saying that he who has no pets has no love for home. The woman who delights in the company of neither bird nor animal, finds the society of gossips and street runners the most attractive. The poultry woman makes the model wife. City life has no charms for her. Her home and her fowls are everything, and in them she finds comfort, health and strength. The patient, kind hearted woman alone makes a success in egg and poultry culture, while the fickle-minded, grumbling female would not think of stooping so low as to "mingle with such pests." A once poultry woman was, by force of circumstance, taken from her country home to a tenement in the city. Although she lives in a more elaborate dwelling, and owns finer furniture, she is cooped up in a narrow court amid the noise and din of slop carts and drayages. "If I could only get out of this way of living," she said, "back again to a rural home, where I could keep poultry as I used to. Then I always had money and clothing—many a month I made more clear money with my fowls than my husband did with his crops—but, helping a friend on a note did it, and here we are; the mint has passed out of our hands. Were it not for the disgrace I would far rather live all my life in a real jail, behind genuine iron bars, than to subsist from hand to mouth in this prison they call city life." If there were more such sensible women in this world there would be less half-starving families in the cities.

### One Sided Dairy Knowledge.

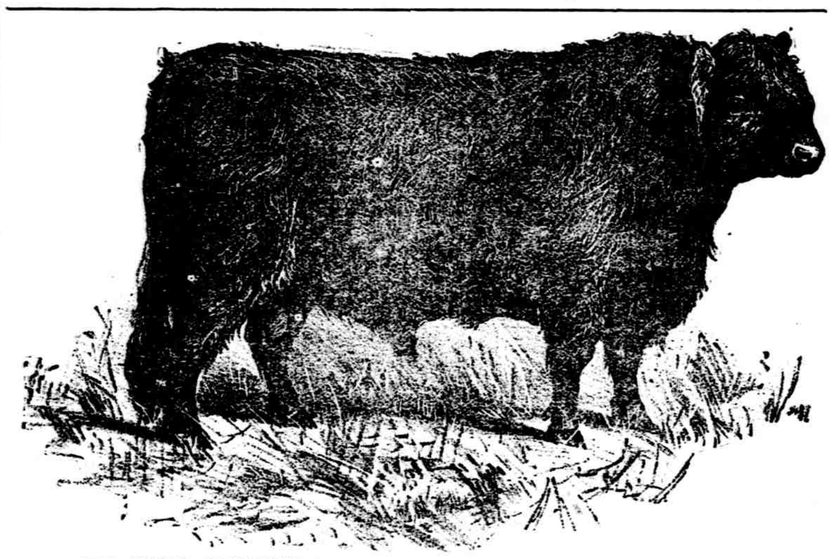
Beware of the man of one experience. His knowledge is very exact, but it is too narrow. In an esteemed contemporary we find a man writing about garget—his cows all got it, and because he was feeding four parts of corn meal to one of bran, he attributes all his troubles to corn meal, and advises, as does the paper, against too much corn meal. All of my cows got garget once, and I had been feeding them on shorts, or a rich kind of bran with no corn meal, ergo, do not feed shorts. Probably others could give a like experience with all the other popular feeds until we could not feed anything. Again I say, beware of the man with one experience. His limited knowledge makes him the more positive in his opinions. He who really knows it all knows there are two very strong sides to all questions, with any number of conditions to be taken into consideration.—Farm and Home.

THE CABBAGE MAGGOT.—Extensive depredations of this maggot are reported this summer by the market gardeners of Long island. The early cabbage suffered very severely from them, while the late planted varieties are almost entirely free. It has lately been learned that the insect lives and breeds on the charlock or wild mustard and other plants of the mustard family, in the absence of cabbage plants. The omission to grow a crop of cabbages will not, therefore, ensure a riddance of the insect the following year, unless at the same time the ground has been kept free of weeds, especially those of the mustard tribe. One of the best means of preventing the attack of the insect, which lays its eggs on the young plants soon after transplanting, is to wind a bit of tissue paper around each plant. But this is expensive except in private garden operations on a small scale. A number of substances have been used for the purpose of killing the maggots, but none really satisfactory. Prof. Slingerland of the Cornell experiment station, is at work on this problem. The insect from which the maggot comes has until lately been thought to be Anthomyia brassicæ, but lately it has been learned that this is a mistake, and it is doubtful if the insect which bears this name is in this country. The true name is now said to be Phorbia floccosa.—Vick's Magazine.

MONEY IN FARMING.—There is no trouble in making farming pay for the labor bestowed upon it, together with a good per cent on the value of the property concerned. We know this from our own operations, and we also see it illustrated by any number of farmers round about us. The idea that there is no money in farming is all nonsense. Go through any community of farmers and it will be found they are generally getting on well in the world. Anything different from this is the exception to the rule. At the same time they have but a small capital invested, yet they spend money freely, have more of the comforts, luxuries and pleasures of life than any other class of laboring people, and in addition, as a rule, lay by something each year out of the profits of their business.—Ex.

DIPPING HENS FOR LICE.—It is not pleasant work to dip a lot of hens in order to rid them of lice, says Farm and Fireside. The best substances to use are some of the well-known sheep dips. The hens should be held by the legs, heads down, with one hand holding the head. Dip them with the head under first, and let the solution cover every portion of the body, not even the toes excepted. Pull them to and fro in the tub two or three times and set them free. It should be done only on warm, clear days.

A sow that has been tried and proved herself a good mother should in nearly all cases be kept as long as she can be made serviceable.



THE NOTED GALLOWAY BULL HARDIN OF ENGLAND.—FARMERS' REVIEW.

# FARM AND GARDEN.

## MATTERS OF INTEREST TO AGRICULTURALISTS.

**Some Up to Date Hints About Cultivation of the Soil and Yields Thereof—Horticulture Viticulture and Floriculture.**

### Kind of Horse to Breed.

M. Butterworth, speaking at a Missouri convention, said: The question of the day is what kind of horse to breed. So long as American farmers find stock raising the chief reliance, draft horse breeding must be the most profitable and substantial branch of agriculture. So long as the cities and factories continue to grow, so long will the demand for good draft horses continue, and good prices be maintained in all the leading markets of the world. While many farmers content themselves with using small scrub horses on the farm, it does not pay to raise them; better raise a big high-grade colt that will at maturity sell for enough to buy two little horses. The farmer that will content himself with only small horses to do the farm work generally breeds to a cheap horse and raises a cheap colt, while the more enterprising farmer breeds to the best imported horse available, and raises a colt to be proud of, that grows rapidly, and when 2 years old is so well matured that he can work enough to pay his board, and, when 3 years old, drive to town with a load, and he can take a load that is a load. The horse buyers are continually asking your price for that horse, while the farmer driving the little scrub never is asked such questions. But it pays to keep these big grades until they are 4 or 5 years old to thoroughly mature and harden them for the city work. The dealers who are eager to buy our young draft grades have them matured further east and double their profit. It pays our western farmers to keep them to maturity. Few farmers can afford the luxury of a non-producing team of geldings or mules that can not breed. Many of our western farmers find the draft mares the most profitable and the most practical farm team for heavy plowing with a big plow, for hauling all our heavy farm machinery, for taking large loads of grain to market and large loads of manure to the fields, and when once we use them on the farm we will never do without them. Some here may say they are too big and clumsy and too slow for them. The model draft horse is not clumsy or slow; the American draft horse is not bred on that line; as to size, we want all the size we can get; there will be, in spite of our best efforts, too many small horses. We must have better mares to raise the better class of extra heavy draft and coach horses for the city markets. Grade up as fast as possible, keep all the good mares and they will breed better with each additional cross; breed to the best of sires and you will have the best colts. Then you will take better care of them, and best of all, get the best prices. You will not have to hunt a buyer or sell on time. If France, with her 3,000,000 horses, has increased her exportation from 10,000 in 1880 to 36,000 in 1889, what might we do in ten years with our 14,000,000 horses if they were only the right kind, if they only had the size for the foreign markets. Our export of horses last year was less than four thousand head; let the good work of improvement go on until American horses are the equal of the horses of any European country, and good enough to suit the best markets of the world.

### Blindness Among Horses.

It has been stated that blindness is more prevalent among horses in America than among those of other countries. If this is the case the causes of the evil should be investigated and removed if possible without delay. It is the fact that blindness is more prevalent among horses in Ohio than those of any other section of the country, says the New York World. The cases of blindness are attributed in a great measure to over-feeding, the Ohio horses being notoriously fat. It is a common practice to force the fat upon horses intended for sale by stuffing them principally with Indian corn, and keeping them without service in warm close stables. This method of feeding soon fattens a horse, but at the same time its digestive functions are injured by the treatment. It is now believed that blindness can be traced to a sympathetic relation between disorder of the digestive organ and the brain, and that through the latter the optic nerve becomes diseased and ends in destroying the vision. Blindness is also frequently transmitted to the offspring, and thus an evil, first originating in disease, also becomes a defect by hereditary descent. Errors in feeding horses, as is well known, also produce blind staggers and organic diseases of the brain, therefore the greatest care should be exercised in feeding them. In order to prevent the spread of horse blindness it is recommended that whenever the animal shows the least symptoms of the disease it should be kept on a light diet of hay and oats. A horse may be maintained in good condition on twelve pounds of hay and five pounds of oats for daily food. In breeding horses it is also recommended that all animals showing the least symptoms of organic disease be rejected. One of the first symptoms incident to blindness, which any person may readily notice, is the disposition of the animal to raise his forelegs unnecessarily high, while, at the same time, the ears were drawn back and forth in quick succession, and thus giving sure evidence that the sagacious animal is sounding the ground over which he travels. These are the principal ideas advanced by most veterinarians respecting the cause of prevalent horse blindness in our country and a mode of arresting the spread of the evil. There are some other causes of this disease which appear more evident, any of which are perfectly capable of removal. Blind horses are more common in cities than in the rural districts. This is principally caused by bad stables. Many of them are underground cellars, and with few exceptions all stables are too small. They do not admit a sufficient quantity of fresh air for ventilation and respiration, and this always tends to injure the health of the animals. Light is as essential to the health of horses as that of men, and yet most stables are nearly as dark as dungeons. It would be far better for most of the horses in our cities to be kept in open sheds than in the stables commonly provided for them. I am also positive that eye-blinds on the harness tend to injure the eyes of horses, and as they are totally useless and unsightly appendages they should be abandoned entirely. The open bridle has become more common, but it could be universal. Tight, close collars, which squeeze the eyes of horses in putting them on, are also very injurious to the eyes of the animals. I have known one case of permanent injury to the eyes of an excellent horse from this cause. Carriage and draft horses should be provided with divided collars, secured either at the top or bottom, so that they are not required to be forced over the heads of the animals.

### The Work of Leaves.

In the fall of the year the deciduous trees shed their leaves, the organs by which they derive nutrition from the atmosphere in the form of carbonic acid. During the period of growth each leaf is an active chemical laboratory, drinking in carbonic acid, decomposing it, assimilating the carbon and giving off the superfluous oxygen. This decomposition of the carbonic acid takes place only during the day. Light is essential to the process, and our short winter days do not furnish it in sufficient quantity; moreover, leaves are delicate structures, affording very little protection from cold to the sap circulating through them, and would, consequently, if they remained on the tree, be killed by the first frost, causing a sudden arrest of all the functions of life, and a consequent shock to the system which would almost certainly be destructive of life. The transpiration of plants is a very active process; the water taken up by the roots carries small quantities of nutritive matter in solution, this is assimilated by the plant, and the water given off by the leaves. An idea of the activity of the process will be gathered from the statement that a sunflower three feet high requires double its own weight of water every twenty-four hours. With a fall of temperature, the roots cease to take up water. The pores of a pumpkin root close at a temperature of 45 degrees Fahrenheit. The leaves continue to transpire, and the plant gradually dies; the leaves wither for want of moisture and are no longer capable of performing their functions. The fall of the leaves at the beginning of winter is thus necessary to the plant's protection. If they were killed off suddenly by the frost while in the active exercise of their functions the congelation of the large quantity of water circulating through the plant would rupture the tissues and cause death; but the water in circulation having been gradually evaporated at an earlier stage, the plant is in no danger from this cause.

M. C. LATTA in a report to the Whatcom Horticultural society of Washington state, says of propagating and training the currant: In order to obtain the most satisfactory and profitable returns we take cuttings for propagation from bushes that produce the largest amount of good-sized berries, marking them at the time of picking the fruit for that purpose, and our largest yields are invariably obtained in this way, in some instances picking thirteen pounds of fruit from a single stock, as trained in tree form, while under the same conditions it would take an average of three or four of the cherry variety to yield an equal amount. While the currant will bear as much or more neglect than any other of the edible fruits, yet none of them respond so generously to high and thorough cultivation, nor pay a greater percentage on care and labor. The plant is a gross feeder and will assimilate readily any of the coarser of the barnyard or other manures; it is easily propagated from cuttings of about eight inches in length, of the new wood taken from the bush at any time from the falling of the leaves in late summer until the buds are fairly out in the spring; we take cuttings in the fall and heel them in the ground during the winter, covering them lightly with mulch or rough litter, and plant them out as early as the ground can be properly worked in the spring; if heeled in the fall, during the winter the callus for the development of the roots is formed at the base of the cutting, and they make a much better growth the following season than if taken from the bush and planted out in the spring. In planting out cuttings we rub off all buds excepting the two nearest the top; we place them in the ground with the top bud about on a level with the surface and tramp or press the soil very firmly around them; if these methods are carefully observed there will be no difficulty in getting a large proportion of the cuttings to grow.

### Roughage for Cows.

John W. Delk, writing in Epitomist, says: We have been testing for some time the different kinds of roughage commonly raised on the farm, and find that common fodder corn is one of the best for the cows giving milk. Our cows do better, give more milk, and produce more butter when fed on it during winter than any other kind we have tried, and we get such a large yield from the ground, as compared with other kinds of roughage, making from seven to eight tons of the very choicest per acre when it is cured and housed as it should be. When it is cut at the right stage, and properly cured, our cows even eat the stalks, so there is but very little waste. Sorghum is our next preference; it makes an excellent feed for cows in milk, and is one of the best for young cattle. Our cattle will all stay fat and sleek on it, but the ones in milk, when changed from sorghum roughage to that of fodder corn, show a slight increase, both in milk and butter. Hence we recommend fodder corn, in preference to other hay or roughage, for it has been proven to be a fact, here in the south, that sorghum hay could not be excelled by many others for dairy cattle, and some even went so far as to say that it was the best—none excepted. Let that be as it may, our experience has proven to us that the fodder corn produced the greater amount of milk and butter, and that is what we feed and attend to our cows for. It not only proves to be good in winter, but in the dry, hot weather of late summer. When our pastures are failing, we find that a bundle of fodder corn not only increases the amount of butter, but is eaten with a relish by the cows. It may not produce as much per acre as some, such as sorghum, cow-peas, etc., but will make more than the major part of our haying plants per acre, besides giving so much more beneficial results.

HOME FRUIT CAKE.—Three teacupfuls flour sifted with three teaspoonfuls Price's cream baking powder, one teacupful each brown sugar and molasses, half a teacupful of butter, three eggs, half a teaspoonful each allspice, cloves, cinnamon and nutmeg, and half a pound each stoned raisins, currants, citron and figs cut fine, with one teacupful nut meats. Mix the fruit and spices together the day before making the cake. Bake in a slow oven.

FERTILIZATION increases the size and quality of the fruit.

**Do You Wish the Finest Bread and Cake?**

It is conceded that the Royal Baking Powder is the purest and strongest of all the baking powders.

The purest baking powder makes the finest, sweetest, most delicious food.

The strongest baking powder makes the lightest food.

That baking powder which is both purest and strongest makes the most digestible and wholesome food.

Why should not every housekeeper avail herself of the baking powder which will give her the best food with the least trouble?

Dr. Haines, of Rush Medical College, Consulting Chemist of the Chicago Board of Health, says: "Royal is not only the purest, but the strongest baking powder with which I am acquainted."

### To Fat to Walk.

Sitting as a profession would seem a novelty, but that is the professfon followed by a man in Indianapolis. His name is Harry Jenningsi He weighs 360 pounds and his good nature is in proportion to his superabundance of flesh. So fat is he that walking is almost out of the question, but he manages to go from place to place where he serves at his profession. He has several customers, they are men who conduct offices, but who employ no clerks, and in order to keep their offices while they go to lunch or other meals, employ Jennings to occupy a chair and attend to business which may "drop in" during their abscence. One of these offices has a telephone, and Jennings takes a seat at the telephone where he will not have to stir during the hour he is on duty. His great pleasure is to sit in a revenue position in a chair with his chin resting on the back. He will sit this way for hours without hardly moving. He draws a pension for obesity.—Indianapolis Sentinel.

**$100 Reward $100.**

The readers of this paper will be pleased to learn that there is at least one dreaded disease that science has been able to cure in all its stages, and that is Catarrh. Hall's Catarrh Cure is the only positive cure known to the medical fraternity. Catarrh being a constitutional disease, requires a constitutional treatment. Hall's Catarrh Cure is taken internally, acting directly upon the blood and mucous surfaces of the system, thereby destroying the foundation of the disease, and giving the patient strength by building up the constitution and assisting nature in doing its work. The proprietors have so much faith in its curative powers, that they offer One Hundred Dollars for any case that it fails to cure. Send for list of testimonials.

Address, F. J. CHENEY & CO., Toledo, O.
Sold by Druggists, 75c.
Hall's Family Pills 25c.

### No Postage Stamps Sold.

In Mexico when the mail arrives at the postoffice the names of people to whom letters are addressed are written on a slip of paper and posted on a bulletin board. Merchants go every morning to examine this announcement, and if they find their names on the list hand their cards to the delivery clerk, who hands them their mail. No postage stamps are sold, but those having letters to mail take them to the postmaster, who sticks the stamp on. In all public places men are found sitting around provided with pen, ink and paper, ready to conduct the correspondence of any one who has not the ability to do so. The number of these scribes proves that their business is a paying one.

**That Joyful Feeling**

With the exhilarating sense of renewed health and strength and internal cleanliness, which follows the use of Syrup of Figs, is unknown to the few who have not progressed beyond the old time medicines and the cheap substitutes sometimes offered but never accepted by the well informed.

### A Floral Mystery.

The Chinese, Japanese and Siamese are particularly skillful at botanical feats. One of their wonderful achievements is known as the "changeable rose." This bloom is white in the shade and red in the sunlight. After night or in a dark room this curiosity of the rose family is a pure white blossom. When transferred to the open air the transformation immediately steps in, the time of the entire change of the flower from white to the most sanguine of sanguine hues depending on the degree of sunlight and warmth. First the petals take on a kind of washed or faded blue color, and rapidly change to a faint blush of pink. The pink gradually deepens in hue until you find your lilly-white rose of an hour before is as red as the reddest peony that ever bloomed.

TAN and FRECKLES warranted to be removed by No. 277,840. Sent by mail with instructions, on receipt of price, 50c, by SNOW, LUND & CO., Omaha, Neb.

A genius is a man who does something that others say cannot be done.

There is no way of getting children to be good like showing them how.

You don't have to hunt far to find a licking.

### Making Use of Natural Laws.

Instances of a more complex character frequently occur where a knowledge of natural laws or forces may be brought into operation to assist in surmounting difficulties. Thus, a few years ago, an iron bridge of considerable length, the weight being about 200 tons, was constructed in England and erected in a remote part of Germany. By some mishap, the bridge, when finished, was found to be some distance "out" to one side, an error which the proprietors insisted should be rectified. To take down and re-erect the bridge would be simply ruin to the contractor. But necessity is the mother of invention, and so it proved in this case. It was summer time, and the contractor proceeded to find the amount of expansion which was caused by the heat of the sun over the whole length of the bridge. He next ascertained what contraction took place in the night by cooling. Armed with these data, he thought it might be possible to bring the bridge to its proper position in a few days. The bridge, of course, in its ordinary condition expanded from the center, pushing its two ends outward, or farther apart, and again contracting toward the center. Taking advantage of these conditions, one end was made fast in the morning, and the bridge was forced to expand from that immovable point, instead of from the middle, as formerly. When the iron composing the bridge had expanded to its full extent in the direction intended, that end was released, and the opposite end made fast. The bridge then contracted toward its true position. Thus, whatever was gained by the day's expansion was secured by the subsequent contraction when the metal cooled at night, and, the process being renewed day by day, the work was successfully accomplished.

### He Was Overcome.

He called himself a commercial traveler, but vulgar people style him a drummer. He walked into a hotel office and proceeded to place his several pieces of luggage in the keeping of a son of Ham. Then he carelessly took up a pen and was registering his name when a good-sized sample of the cimex lectularius made its way slowly across the page of the register. The drummer stopped suddenly, and, after taking a long look at the insect, he cried: "Well, I've traveled all over the United States, and put up at all sorts of hotels, but I'm blessed if this isn't the first house I ever struck where those things come down-stairs and find out the number of a fellow's room."

He said to her: "The moon is always just the same, and yet I always find some new beauty in it." She said to him: "It's just so with the circus." He bought tickets for two.

**Make Your Own Bitters!**
**Steketee's Dry Bitters.**

One package of Steketee's Dry Bitters will make one Gallon of the best bitters known; will cure indigestion, pains in the stomach, fever and ague. Acts upon the Kidneys and Bladder; the best tonic known. Sold by druggists or sent by mail, postage prepaid. Price 50 cts. for single, or two packages for 50 cts. U. S. stamps taken in payment. Address GEO. G. STEKETEE, Grand Rapids, Mich.

A FEW weeks ago some miners discovered in the mountains near Bonanza City, Idaho, the mammoth head and horns of a mountain ram firmly imbedded in a pine tree some eighteen inches in diameter. The tree had grown around the head, leaving the horns protruding. As the horns are some twenty feet from the ground, everybody is speculating as to how that ram got its head into the tree at such an elevation.

**Karl's Clover Root Tea,**
The great blood purifier, gives freshness and clearness to the Complexion and cures Constipation. 25c., 50c., $1.

France has an anti-tobacco league, and the president of the affair has cordially endorsed the elevation of M. Casimir-Perier to the chief magistracy of the republic because the latter is not a smoker. "He does, occasionally, it is true, dip his hand into a cigarette box, but after a whiff or two he throws the poisonous weed away."

**If the Baby is Cutting Teeth.**

Be sure and use that old and well tried remedy, MRS. WINSLOW'S SOOTHING SYRUP for Children Teething.

LIZZIE HAMPTON, a colored woman living in Union county, South Carolina, gave birth to two children of the Siamese-twin order. They are joined together by a union of the breast-bone, having but one navel, but supposed to have two sets of intestines confined in one cavity. They are living and attracting much attention.

**"Hanson's Magic Corn Salve."**
Warranted to cure or money refunded. Ask your druggist for it. Price 15 cents.

A NEGRO, after gazing at some Chinese, shook his head and solemnly said: "If de white folks be so dark as dat out dar, I wonder what's de color of de black folks?"

**Hegeman's Camphor Ice with Glycerine,**
Cures Chapped Hands and Face, Tender or Sore Feet, Chilblains, Piles, &c. C. G. Clark Co., New Haven, Ct.

Positive opinions are not easily purchased.

Private indifference kills public spirit.

Billiard Table, second-hand. For sale cheap. Apply to or address, H. C. ARIN, 511 S. 12th St., Omaha, Neb.

BUDS, Society buds, young women just entering the doors of society or womanhood, require the wisest care. To be beautiful and charming they must have perfect health, with all it implies—a clear skin, rosy cheeks, bright eyes and good spirits. At this period the young woman is especially sensitive, and many nervous troubles, which continue through life, have their origin at this time. If there be pain, headache, backache, and nervous disturbances, or the general health not good, the judicious use of medicine should be employed. Dr. Pierce's Favorite Prescription is the best restorative tonic and nervine at this time. The best bodily condition results from its use. It's a remedy specially indicated for those delicate weaknesses and derangements that afflict womankind at one period or another. You'll find that the woman who has faithfully used the "Prescription" is the picture of health, she *looks well* and she *feels well*.

In catarrhal inflammation, in chronic displacements common to women, where there are symptoms of backache,