



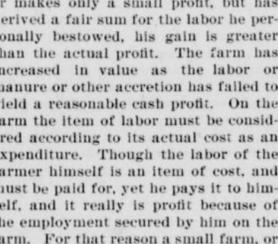
**A Bank Greenhouse.**  
Where the "lay" of the land is favorable, a very convenient greenhouse or forcing house can be constructed after the plan shown in the accompanying illustration. The basement is carried into the bank only far enough to give room for a heating apparatus and the storing of necessary fuel. The greenhouse floor is partly below the surface, the walls here, as well as in the case of the basement, being laid up with



rough field stones. The entrance is at the further end, steps down from the doorway to the greenhouse floor being provided. Such a building will be exceedingly warm in winter, not only because of the earth bank, but because heat can be generated and sent to a floor above much more readily than it can be generated upon and diffused over a single floor.—American Agriculturist.

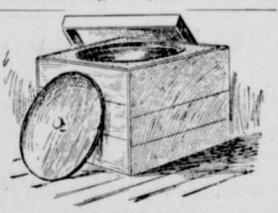
**Farm Economy.**  
Profits on the farm are much greater when the averages for several years are compared, as each year must bear its proportion of expense, and a failure to secure a profit this year may not be a loss, because there may be a corresponding reduction of expense next year. Nor must we overlook the advantage of the opportunity offered the farmer of selling his own labor in the form of some product. Where a farmer makes only a small profit, but has derived a fair sum for the labor he personally bestowed, his gain is greater than the actual profit. The farm has increased in value as the labor or manure or other accretion has failed to yield a reasonable cash profit. On the farm the item of labor must be considered according to its actual cost as an expenditure. Though the labor of the farmer himself is an item of cost, and must be paid for, yet he pays it to himself, and it really is profit because of the employment secured by him on the farm. For that reason a small farm, or a small flock or herd, will always pay more, in proportion to expense incurred, than larger areas or an increase of stock.—Grange Homes.

**A Winter Feed Cooker.**  
Warm mash is desirable for fowls and hogs in winter. To cook the food with but little labor, take half a barrel and set it in a grocery box, filling in about it with chaff. Make two covers, one to fit inside the barrel, the other to shut tightly down over the box. Put in the meal and wet it soft with one or more pails of boiling water. Do this at night and close tightly. The mass will cook all night long and be nice and



warm for feeding in the morning.—Orange Judd Farmer.

**Sparrows Destroying Grapes.**  
It is becoming extremely difficult near cities to grow and ripen grapes, because of the attacks of sparrows on this fruit so soon as it begins to color. Fortunately this pest does not go far from cities and large villages, where it finds plenty of feed scattered in the streets, and where the warmth from city houses affords it partial shelter. But we have learned enough about the habits of the sparrow to know that it is a pest that should be destroyed wherever seen. In England thousands of boys are employed to watch grain fields and drive the sparrows away. But even after all this care millions of dollars' worth of grain is destroyed by them every year.—Exchange.



**Barreling Pork.**  
When the time for putting up pork approaches the barrels for that purpose should be got out of the cellar and thoroughly scalded. No beef barrel should ever be used for pork, for no matter how thorough the scalding it gets, some germs will remain and taint the pork. Where pork has been kept in good condition the brine is often used a second time, after thoroughly boiling it and skimming off the refuse so long as any appears. But it is perhaps better to use the pork brine as a fertilizer for quince trees, putting one or two quarts only around each tree. There is much nutritious taken from lean pork by the brine when the pork is salted, and this is excellent fertilizer for the quince. As for

the salt is the brine, that is a solvent of mineral matters in the soil, and thus helps the quince tree.

**Feeding the Work Horse.**  
In feeding the working horse I would feed corn and oats, equal parts, either ground or whole, and if convenient change from marsh hay to clover. Corn meal should not be fed without some diluent. The bran of oats is sufficient to prevent it becoming a pasty mass in the stomach. If meal is not mixed with ground oats or with bran, it should be fed with dampened cut hay or cut sheaf oats. With a ration of corn, oats and timothy hay or marsh hay, either bran or oil meal or sprouts should be added, say six pounds of bran a day, or if oil meal two pounds a day, or three to five pounds of sprouts. If fed in the ear, corn may be fed three times a day, with oats and bran added at noon and night, with less corn. A good day's feed for a 1,200-pound horse is 14 pounds of hay, 10 pounds of corn meal, 6 pounds of oats and 6 of bran. In place of bran one may use two pounds of oil meal. If he feeds clover hay he does not need either bran or oil meal. Corn should never be omitted from the ration of a horse at hard work, just as meat is essential in the food for laboring men. I once knew a teamster hauling gravel to say that ten ears of corn at a feed (thirty ears a day) did not keep his horses up. He was told to quit counting corn, and feed with a scap shovel. This he did, and stopped losing flesh. This was, of course, in the severest kind of work, long continued.—Rural New Yorker.

**Lime the Land.**  
Lime is not used as much as formerly, and yet it is one of the most essential substances entering into the composition of plants. It is not only plant food, but it exerts a chemical effect on the soil, which brings into use other materials which are beyond the capacity of plants to reduce. When green food is turned under, lime will be found a valuable adjunct, as it combines with them. It is a heavy substance and has a tendency to go down, hence, if broadcast on the surface of a field, it will sooner or later be within the reach of plants. Some lime that has been air-slaked until it is fine is better than any other form, and that from the gas works (mostly sulphites and sulphides) should not be procured. Every farm should be limed occasionally, as the benefit is sure to be much more than the cost and no harm can result.

**Cures a Horse's Rheumatism.**  
Horses troubled with rheumatism have been treated successfully with Turkish baths. Trainer Patterson gave Hamburg one a few weeks ago and the king of 2-year-olds came out of the bath as supple as a youngster. The



rheumatism had disappeared. He subsequently led his field under the wire.

**Salt for Apple Orchards.**  
While it is well understood that salt is not a manure, it is so good a solvent of other minerals that where they exist in the soil it may always be used with advantage. We have often advised farmers to apply both potash and phosphate to apple orchards. But if this is done every year it is probable that some of these minerals revert to an insoluble condition. Whenever the apple trees set full for bearing it will pay while giving the usual annual dressing of potash and phosphate to add some salt to it, which will be much cheaper and probably more effective than supplying directly the minerals which the salt will indirectly furnish.—Exchange.

**Beef and Butter Breeds.**  
If a beef breed of cattle is preferred make beef production a specialty, and not look upon cows of such breeds to be perfect as producers of milk and butter. There may be a few good butter cows among the beef-producing breeds, but where a certain article is desired it should be the prime object. If milk and butter are specialties the breeds used should be those that excel in those products. Too many good points cannot be had in cows. Each cow will excel in one line only, and should be made to do duty where the most profitable.

**Clover Meal.**  
Clover hay is now on the market in the form of clover meal. It is scalded and used for calves, but finds more favor with those who feed pigs, it being found excellent as an addition to skim milk. The clover meal, if scalded, becomes soft and swells and has been found very wholesome and nutritious, as well as highly relished by young stock.

**No Alderneys.**  
Farmers and dairymen are not as particular in making known their goods in a manner to impress the fact that they thoroughly understand their calling. "Alderney milk" is a frequent sign on milk wagons, says the Philadelphia Record, yet there is no such article, as there is not an Alderney cow in the United States. "Durham" cattle is used for designating the short-horns, although the term is one that does not now apply to any particular breed.

**High Priced Rams.**  
A merino ram sold for \$8,000 at Sydney, and at other points in Australia from \$2,000 to \$6,000 have been paid for rams. These prices are high, but the sheep breeders did not make any considerable profit until they began to buy the best rams in other countries.

**DEFECTS IN ELEVATORS.**

An Air Cushion the Latest Scheme to Prevent Injury If the Car Falls.

The elevator is a labor and time saving device in such common use that no consideration should stand in the way of reducing to a minimum the element of danger. Yet accidents occur so frequently that it would seem as if progress to a safe and safe had stopped. Only in very rare cases does a car "drop." This could happen only if all the cables supporting it should part. In the great majority of accidents the car "runs away," or gets beyond the control of the operator, and nothing can prevent disaster but an automatic device which will stop the car gradually. No such device which can be absolutely depended upon is now in use.



Manufacturers are unanimous in declaring the average "elevator man" or "boy" is incapable of properly operating an elevator. No elevator is simple. The passenger does not see and could not understand the complicated mechanism necessary to its working. Yet these delicate machines are often placed in charge of ignorant boys or men whose qualifications are limited to a superficial understanding of the working power and safety devices.

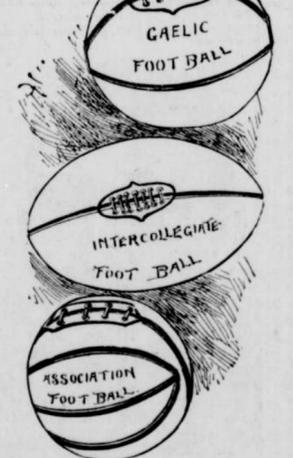
The engineer of a locomotive must pass a severe examination and serve an apprenticeship before he is entrusted with the lives of passengers, and even gripmen and motormen operate their cars for a long time under the eye of an experienced man. A 16-year-old engineer or motorman would never be employed. It is suggested that cars should be placed in charge only of men who are old enough to be clear-headed, who have passed a suitable examination as to knowledge and general fitness.

A scheme which is in use in a few buildings and has given good satisfaction is an air cushion in the bottom of the shaft. The lower part of the shaft for a distance of several feet is made air tight. When a falling car drops into this "tube" the air below it acts as a cushion, and the stop is made gradual by the escape of the air around the sides of the car. For experiment a car has been dropped repeatedly 125 feet into one of these cushions, and stoppage was not of sufficient abruptness to break eggs on the car floor.

**THREE NOW USED.**

The Intercollegiate, the Gaelic and the Association Footballs.

Three kinds of footballs are used by foot-ball players. The official intercollegiate foot-ball is an ellipse. That used in the Gaelic game is almost a



THESE CAUSE LOTS OF TROUBLE.

perfect globe and the association football is perfectly round. The intercollegiate foot-ball is the only one which can be picked up and carried.

**The Jack Rabbit.**  
Kansas dealers in hides have at length awakened to the fact that jack rabbit hides, known in commerce as American hare pelts, are in great demand in the Eastern market, and notices similar to the following are appearing in many papers throughout the State:

"We will buy nicely handled cased jack rabbit skins at 3 cents each; opened or damaged, half price; culls and pieces 3 cents a pound; cottontails at 5 1/2 cents a pound. Must be perfectly dry and free of meat."

The skins of the jack rabbits are used for making hats. The best quality of hats, says the New York Times, are made from fur, and the fur has heretofore been obtained from Australia, where the rabbits are successfully disputing the possession of the country with the human inhabitants.

**The Rait Spider.**  
What is known as the rait spider is the largest of the British species. It receives its name from the fact that it constructs a raft of dried leaves and rubbish united by threads of silk, and thus pursues its prey on the water.

The wind has a great deal to do with making the weather—vane.

**To Still the Ocean's Waves.**

A scheme to increase the efficiency of oil to still the waves of the ocean in a storm has been thought out by William Guthrie, of Chicago. His notion is based on the argument that if oil has a pacifying effect when distributed on the water in the immediate neighborhood of the ship in trouble, its effect would be magnified if the oil could be applied at a distance all about the ship, thus creating a calm circle, in which the ship could ride in safety until the storm had spent its fury. His proposition is to shoot saturated sponges or cotton from a pneumatic gun, that being preferable to a powder gun, as there would be no danger of igniting the oil-soaked sponge. Some people interested in shipping have been impressed with the idea and application is to be made to congress for an appropriation to test its efficiency.

In the publication of the Berlin Academy of Sciences, Professor Roentgen has an article in which he confirms the observation of Dr. Brandes that it is possible to make the X-rays visible to the eye.

**KNOCKED OUT.**

It knocks out all calculations of attending to business in the right way for a day when we wake up in the morning sore and stiff. The disappointment lies in going to bed all right and waking up all wrong. There is a short and sure way out of it. Go to bed after a good rub with St. Jacobs Oil and you wake up all right; soreness and stiffness all gone. So sure is this, that men much exposed in changeable weather keep a bottle of it on the mantel for use at night to make sure of going to work in good luck.

A floral curiosity is on exhibition in the Temple Gardens, London. It is a \$5,000 orchid from Venezuela. It has a white flower which in shape resembles a sea-gull with outspread wings.

**THE PURSUIT OF HAPPINESS.**

When the Declaration of Independence asserted man's right to this, it enunciated an immortal truth. The bilious sufferer is on the road to happiness when he begins to take Hostetter's Bitters, the most efficacious regulator of the liver in existence. Equally reliable is it in chills and fever, constipation, dyspepsia, rheumatism, kidney trouble and nervousness. Use it regularly and not at odd intervals.

If you look at the map you will find that the mountain chains of the Old World lie east and west, while those of the New World lie north and south.

**AN OPEN LETTER TO MOTHERS.**

We are asserting in the courts our right to the exclusive use of the word "CASTORIA," and "PITCHER'S CASTORIA," as our Trade Mark. I, Dr. Samuel Pitcher, of Hyannis, Massachusetts, was the originator of "PITCHER'S CASTORIA," the same that has borne and does now bear the fac-simile signature of CHAS. H. FLETCHER on every wrapper. This is the original "PITCHER'S CASTORIA" which has been used in the homes of the mothers of America for over thirty years. Look carefully at the wrapper and see that it is the kind you have always bought, and the signature of CHAS. H. FLETCHER on the wrapper. No one has authority from me to use my name except The Centaur Company of which Chas. H. Fletcher is President.

March 8, 1897. SAMUEL PITCHER, M.D.

Benjamin Bissell, who lives near Ballston Spa, N. Y., says he has voted for eighteen presidential candidates, not one of whom was elected.

**HOME PRODUCTS AND PURE FOOD.**

All Eastern Syrup, so-called, usually very light colored and of heavy body, is made from glucose. "The Garden Syrup" is made from sugar cane and is strictly pure. It is for sale by first-class grocers, in cans only. Manufactured by the PACIFIC COAST SYRUP CO. All genuine "The Garden Syrup" have the manufacturer's name lithographed on every can.

Piso's Cure for Consumption is the only rough medicine used in my house.—D. C. Albright, Mimbunburg, Pa., Dec. 11, '95.

Fry Schilling's Best tea and baking powder.

Diamonds have been discovered, in rare instances, in the meteoric stones which have fallen to the earth.

"King Solomon's Treasure," only Aphrodisiacal Tonic known. (See Dictionary.) \$3.00 a box, 3 weeks' treatment. Mason Chemical Co., P. O. Box 77, Philadelphia, Pa.

In every mile of railway there are seven feet four inches not covered by the rails, the space left for expansion.

The number of stars pictured on the latest English and German photographic atlases is about 68,000,000.

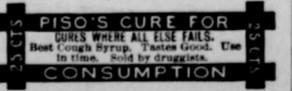
There are no rats, mice or cats in Santa Fe, N. M. The air there is too rarified for them to exist.

**YOUNG WOMANHOOD.**

Sweet young girls! How often they develop into worn, listless, and hopeless women because mother has not impressed upon them the importance of attending to physical development.

No woman is exempt from physical weakness and periodical pain, and young girls just budding into womanhood should be guided physically as well as morally. If you know of any young lady who is sick and needs motherly advice, ask her to address Mrs. Pinkham at Lynn, Mass., and tell every detail of her symptoms, surroundings and occupation.

She will get advice from a source that has no rival in experience of women's ills. Tell her to keep nothing back. Her story will be told to a woman, not to a man. She need not hesitate in stating details that she may not wish to mention, but which are essential to a full understanding of her case, and if she is frank, help is certain to come!



**\$2000.00**

The contest ends December 31st.

Schilling's Best baking powder and tea are because they are money-back.

What is the missing word?—not SAFE, although Schilling's Best baking powder and tea are safe.

Get Schilling's Best baking powder or tea at your grocers'; take out the ticket (brown ticket in every package of baking powder; yellow ticket in the tea); send a ticket with each word to address below before December 31st.

Until October 15th two words allowed for every ticket; after that only one word for every ticket.

If only one person finds the word, that person gets \$2000.00; if several find it, \$2000.00 will be equally divided among them.

Every one sending a brown or yellow ticket will receive a set of cardboard creeping babies at the end of the contest. Those sending three or more in one envelope will receive an 1898 pocket calendar—no advertising on it. These creeping babies and pocket calendars will be different from the ones offered in the last contest.

Better cut these rules out.

Address: MONEY-BACK, SAN FRANCISCO.

GET THE GENUINE ARTICLE!

**Walter Baker & Co.'s**  
**Breakfast COCOA**  
Pure, Delicious, Nutritious.  
Costs Less than ONE CENT a cup.  
Be sure that the package bears our Trade Mark.

**Walter Baker & Co. Limited,**  
(Established 1780.)  
Dorchester, Mass.

**POWER**  
...FOR...  
**PROFIT**

Power that will save you money and make you money. Hercules Engines are the cheapest power known. Burn Gasoline or Distillate Oil; no smoke, fire, or dirt. For pumping, running dairy or farm machinery, they have no equal. Automatic in action, perfectly safe and reliable.

Send for illustrated catalog.

**Hercules Gas Engine Works**  
Bay St., San Francisco, Cal.

**Hercules Special**  
(2 1/2 actual horsepower)  
Price, only \$185.

**DEAFNESS CANNOT BE CURED**

By local applications as they cannot reach the diseased portion of the ear. There is only one way to cure deafness, and that is by constitutional remedies. Deafness is caused by an inflamed condition of the mucous lining of the Eustachian Tube. When this tube is inflamed, you have a rumbling sound or imperfect hearing, and when it is entirely closed, deafness is the result, and unless the inflammation can be taken out and this tube restored to its normal condition, hearing will be destroyed forever; nine cases out of ten are caused by Catarrh, which is nothing but an inflamed condition of the mucous surfaces.

We will give One Hundred Dollars for any case of deafness, (caused by catarrh) that cannot be cured by Hall's Catarrh Cure. Send for circulars; free.

F. J. CHENEY & CO., Toledo, O.  
Sold by druggists, 7c.  
Hall's Family Pills are the best.

**A Free Book for Men**

**DR. SANDEN'S ELECTRIC BELT**

For men who have wasted their vigor and youthful energy, who feel slow, stupid and weak. For young men, middle-aged and old men who would like to be stronger. Dr. Sanden offers free a book that is worth \$1,000 to any weak man. It tells and proves by hundreds of grateful letters how DR. SANDEN'S ELECTRIC BELT restores the old man, the vim, the vigor, (all or send for it. It is FREE. By mail or at the office.

**SANDEN ELECTRIC BELT CO.**  
253 West Washington St., Portland, Or.  
Please mention this paper.

**FREE MEDICAL BOOK FOR MEN**

How to Restore Lost Manhood and Perfect Development.

This great work, plainly written by a high medical authority, shows how many vigor can be regained and obstacles to marriage removed. It is a modern work for men who suffer from nervous debility caused by overwork, youthful indulgences or later excesses. It points out how to be cured of nervousness, despondency, impotency, at home, without interfering with business.

IT IS ABSOLUTELY FREE.

This great book, entitled "COMPLETE MANHOOD AND HOW TO ATTAIN IT," will be mailed free, in plain, sealed wrapper, to the address of any sincere inquirer by the Erie Medical Company, 64 Niagara Street, Buffalo, N.Y. No C.O.D. scheme; no deception.

**Kodaks**  
FROM \$4 UP...

WOODARD, CLARKE & CO. PORTLAND, OR.  
Catalogue Free.

**ILLUSTRATED CATALOGS FREE**

**Buell Lamberson**  
180 FRONT ST.  
PORTLAND, OR.

**SPRAY PUMPS**

**RODS** for tracing and locating Gold or Silver  
One, lost or buried treasures. M. D. FOWLER, Box 27, Southington, Conn.

N. P. N. E. No. 51, '97. When writing to advertisers, please mention this paper.