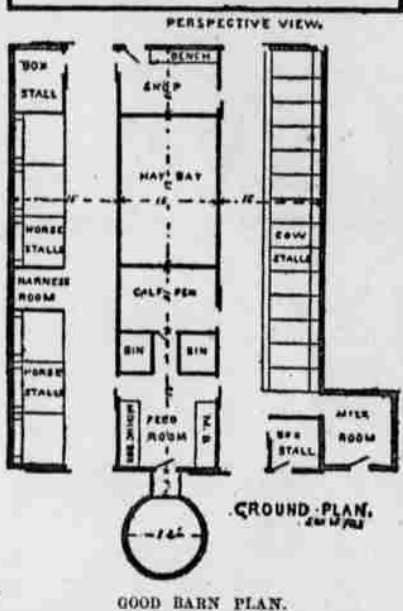
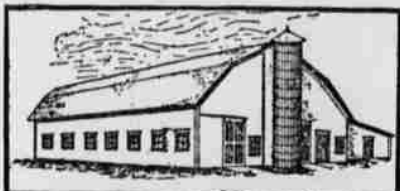




Barn for Mixed Farming.

The farmer who can so adjust his work that he may dispense with the help of one man is lucky indeed, but many a farmer has done so by simply changing his system of feeding and caring for the stock; also by so disposing of the grain and hay that instead of hauling many tons of it to market it is fed on the farm, and the beef, pork, butter, cheese, etc., sold. This allows the farmer to restore to the ground at least a part of the fertility in the shape of manure.

The barn plan shown herewith in the two illustrations, the ground plan and the perspective view, is so arranged that one man may feed and care for the stock in a short time. As shown on the floor plan, the barn will accommodate fourteen cows, twelve horses, has box stalls for both the cows and horses, also a large calf pen. The installation of manure carriers and hay fork is very easy, and these will soon pay for themselves in the labor saved. A feature of the barn not to be overlooked is the arrangement of the feed room and silo. The four-foot chute extends the entire length of the silo, and has small win-



dows for light, a tight door below separating same from the feed room to keep out dust and odors. The silage is dropped down this chute, and from there shovelled to the mixing boxes—one for the cows and one for the horses. There are two bins in the feed room and two more may be located on the floor above and connected by small spouts for drawing off the grain. These spouts may be located directly over the mixing boxes. All hay is supposed to be fed from above, one hay chute being provided for each two stalls.

The milk room being located as it is, the milk may be taken to it at once. In this room should be located the separator; also plenty of clean water; if possible running water should be provided. The shop is a very necessary room, and it will save many small repair bills. In it may be stored the nails, bolts, etc. In the horse barn the harness room is located in the center, which makes it handy to all parts of the same. The two box stalls provide room for both male animals as well as sick and ailing ones.

The hay bay is supposed to be open clear to the roof. However, some farmers may wish to arrange this space different. The partition separating the cows from the center section is boarded or plastered up tight, except the calf pen, to separate the cows from any odors, dust or dirt from the other animals. The box stalls, however, in both the cow and horse barn are so constructed that the inmates may have a good view of the other animals. They like company, and will do better if they can see their neighbors.

The floors of the cow stable, the milk room, feed room and silo are of cement, the gutter being formed in the floor and having a four-inch drain at the rear leading to the manure pit. The stalls are made to fit both long and short cows. The first stall in front is four feet wide and five feet long. The rear stall is three feet six inches wide and four feet eight inches long. The stalls then slope from front to the rear, each stall being slightly shorter. Stalls are now constructed in so many different ways that it is hardly worth while to mention them, every cow man having his

own views of the matter. However, it is wise to build them that the stall may be easily cleaned and washed. This construction will comply with all sanitary requirements of inspectors. The floor of the horse stable may be of cement or clay.

The location, the local supply of materials, etc., will of course govern to a certain extent the material entering the construction of any building and, in fact, all buildings. The barn as shown is twelve feet to the eaves and thirty-eight feet to the peak; the silo is thirty-eight or forty feet high.

The barn should, of course, have a good foundation of stone, brick or cement. On many farms it has been the practice to build a small shed here and there and the stock is scattered all over the farm. This causes an unnecessary lot of labor to care for them; also an unsightly appearance to the surroundings. In constructing a barn of this sort it will not be necessary to do all the work before the same may be used, but a portion of it may be left until time and perhaps your purse will allow it to be finished.—Wallace's Farmer.

Feeding of Eggs.

Hens will not refuse to lay providing the conditions which surround them are favorable for egg production. Of course, a hen cannot keep on laying all the time, nor will some hens lay even for a majority of the time, but the farmer who provides the correct conditions of housing, feeding and general management will find that he will not be entirely without eggs at any time of the year. Of course, it is not the hen's nature to lay at this time of the year, but if she is comfortably housed and well fed, the farmer will find that the hen after all really has little sentiment as to just which season she shall produce her eggs.

Getting eggs is not entirely a matter of feeding, yet if we feed correctly the hens will not have that as an actual obstacle to laying. Maturity and vigor are two important things in the hens that are to be heavy winter layers. Keep the hens in a thrifty, vigorous condition, and be sure and feed a variety. These things count for a great deal toward success. Corn, oats and wheat are the three principal grain feeds, but there are others that may well be fed by way of variety and the meat and green stuff in some form should never be neglected. Give any kind of meat scraps or prepared meat foods, as it pays. Try to keep the hens under conditions as near like those in existence at spring time as you can, and you will not suffer severely from an egg famine. This is nothing impossible, and briefly, only means comfortable housing, a variety of feeds, green stuff and meat scraps, and sanitary quarters.—Agricultural Epitomist.

Small Temporary Smokehouse.

If one butchers only once a year, says a correspondent of Farm and Home, it is not necessary to build an expensive smokehouse, for almost as good



SMALL BUT EFFECTIVE SMOKEHOUSE.

results can be obtained from a device such as the one shown herewith. It is made by taking both ends out of a barrel and mounting it upon a box or above a fireplace in the ground. The meat to be smoked is hung from the sticks laid across the top of the barrel, the fire built underneath and the lid put on.

Destruction by Rats.

There are those who declare that nothing is created in vain, and that rats and mice are in some way a benefit to mankind. It is hard to see just how. The statistician of the Agricultural Bureau at Washington computes that they create \$15,000,000 damage a year. That is the real money damage, saying nothing of the annoyance. As an offset, the rat catchers of the world sell about \$1,000,000 worth of skins per year, and the furriers work them and sell them for five times that sum. It is estimated that a full-grown rat will eat six bushels of corn per year.

SOMETHING FOR EVERYBODY

The first postal card was sped on its way in 1870.

The world's oceans contain 7,000,000 cubic miles of salt.

The Sultan of Turkey is the proprietor of a fine zoological garden.

The top of the Philadelphia city hall tower, which is over 500 feet above the street, probably will be utilized as a wireless telegraph station, to be controlled by the municipality.

About 600 patents are granted each year to British women upon inventions ranging from articles distinctly feminine in nature to motors, railroad cars, flying machines and wireless telegraphy.

The government tests at Washington samples of the chain to be used on the gear of the Panama canal locks withstood tensile tests of 153,000 pounds to the square inch before the metal parted.

It is announced that with the removal of a row of frame buildings not far from Blackfriars' bridge, the last wooden buildings within the metropolitan district of London will shortly disappear.

France is about to amend its present law to provide that a patent shall lapse if its holder shall fail to exercise his right in France or in the colonies of France for a period of three years from its granting.

In New York city last year the fire loss amounted to \$7,250,000, while the maintenance of the fire department cost \$7,000,000. In St. Louis these figures were respectively, \$1,208,000 and \$1,018,000. In the case of Rome, Italy, where the fire losses last year were \$56,000, the cost of the fire department was \$50,000.

Twelve hours, with two hours' rest, is the legal laboring day at Odessa, Russia. Workers under seventeen must go to school for three hours daily. Christians are not required to work on Sundays or feast days, nor Hebrews and Mohammedans on their religious holidays. Those who have to work on Sundays have the next day for rest.

Wagner's little admonition to the musicians was most characteristic and worthy to be noted by many an orchestra of this day. "Gentlemen," he said, "I beg of you not to take my fortissimo too seriously! Where you see 'ff' make a 'fp' of it, and for piano play pianissimo. Remember how many of you there are down there against the one poor single human throat up here alone on the stage."—Neumann's "Personal Recollections."

As the result of special efforts in the hatchery work during the year the output of fish and eggs in 1908 was greater than ever before in the history of the national bureau, reaching a total of 2,871,456,280. Of this number 2,413,800,225 were young fish distributed for the stocking and restocking of public and private waters, and the remaining 457,647,055 were eggs delivered to state and foreign hatcheries. The output of young fish exceeds the greatest previous record for any one year by \$76,000,000.

B. S. Straus, M. P., has elicited from the Home Secretary the statement that in 1908 as many of 2,925 taxicabs were licensed to ply for hire in the streets of London, an increase of 2,202 upon 1907. In the same twelve months the number of hansom cabs licensed decreased by 1,205. Hansoms have in a few years declined by 2,752, while in the same time motor cabs have increased by 2,924. More striking still, nearly the whole of the change has been accomplished in the last three years.—London News.

Dr. Philip Schildrowitz, analytical chemist, London, said in answer to Dr. Adeney that there was a general idea that the word brandy was derived from the German. The English word, however, was as old as its Continental equivalents. It was formerly spelled "brandwine" and then "brand-wine." The prefix, which was common to all the Teutonic words for brandy, meant a thing burning or that had been burnt. Therefore the word meant "burnt-wine." Taking it as an English word, brandy might be defined as a spirit derived by distillation of the fermented juice of any fruit.—London Post.

The ancient silver mines at Freiberg, Saxony, where a number of the older mining engineers of this country were trained in practical work while students at technical institutions in Germany, will be permanently closed in April. These mines have a history going back upward of 1,000 years. The first thalers, from which came the word dollar, were coined from silver from these ancient Saxon mines, and for centuries the German traders, called easterlings, from whose merchants and bankers in England the word sterling as applied to pounds sterling came into use, derived their bar and coined silver for trading at the fairs of all parts of Europe from these Saxon mines. Many a war was fought in order to get control of the silver mines at Freiberg.—Finance.

The Mournful Woman



NCE there was a woman who gloated over the most melancholy topics of conversation, believed laughter a sin, recreation a waste of time and fresh air a menace to health, and found her greatest delight in attending funerals. "I hope I'll be as beautiful a corpse as that," she would remark, as she stood beside the bier of some friend, "and it won't be long now; it won't be long." Everywhere she went this sad sister carried an atmosphere of gloom. Depression filled her mind, fairly embalmed her personality and exuded at every mental pore. She was a perpetual wet blanket to everybody, and her friends dodged her like the butcher's bill or the rent man.

By and by she actually made herself believe that her liver, heart and other economy were out of kilter, and at once she acquired a library of home-doctoring books and devoted herself to study. The more she studied the more certain she became that she was on the quick road to the grave. She just knew that she had every symptom in the calendar of diagnosis.

About every ten minutes of the day she dosed herself with one of the seventeen varieties of medicine she needed to ward off ailments, and getting out of bed every hour of the night to take her tonic soon trained her so she couldn't sleep at all.

Then she had a simply be-utiful time picturing herself in a lovely rosewood casket, lined with pink silk, and a gilt-edged prayer book in her hands with the floral tributes banked in the parlor bay windows, while Dr. Snoozum prayed sonorously for "our dear, departed sister," her friends sniffled into lace handkerchiefs (they always take their very best to funerals) and the choir sang "Nearer, My God, to Thee."

For hours and hours she used to lie awake worrying which dress to be laid out in and what kind of a tombstone to order. By and by she died. Most anyone who thinks about it hard enough can die.—Chicago Journal.



The only living blue bird of paradise in captivity recently was brought to the London zoological gardens at great expense from its native wilds in the Orient.

Imitation coral is made from resin, four parts; beeswax three parts, and vermilion two parts, melted together and thoroughly mixed, then applied to wire or wooden forms.

Although 9,795,908,000 common brick were made in the United States in 1907, the production was 2.31 per cent behind that of 1906. Illinois and New York lead in the industry.

The property which makes selenium interesting and useful is its capability of acting as a fairly good conductor of electricity under the influence of light, while in the dark it is practically a non-conductor. This property has rendered selenium useful for automatically lighting and extinguishing gas buoys, for exploding torpedoes by a ray of light, for telephoning with a ray of light, for transmitting sounds and reproducing pictures at a distance by means of electric wires, and for measuring the Roentgen rays used for therapeutic purposes. So far, says Prof. Philip E. Browning, there has been no production of selenium in the United States outside of small quantities found in the residues from refining copper by electrolytic methods.

Eleven years ago an Italian engineer made a boat of artificial stone, or cement, which excited much interest. It was an excellent boat, and is yet in use. The framework, of light iron rods, was covered with a metallic trellis, and then coats of cement were applied, inside and out, to form the hull. It proved surprisingly resistant to shocks. Since then the same engineer, Gabellini, has made many more "stone" boats, of various forms, and among them a barge, about 54 feet long and between 17 and 18 feet broad, which for several years has been employed for carrying coal in the harbor of Genoa. He also makes pontoons of the same material, which have been used to replace wooden pontoons on the Po. The material lasts better even than iron, and is not attacked by salt water.

The latest report of the Geological Survey on the mineral products of the United States shows that the total annual value of these products increased from \$305,482,183 in 1898 to \$903,024,005 in 1907. In 1906 the value was \$886,110,856. In 1904 it was \$502,149,624, having gradually fallen from \$590,916,009 in 1902. Since 1904 each year has shown an increase, that for 1905 being the largest, when the total jumped up a little more than \$200,000,000 from the preceding year. The non-metallic products have regularly risen in value from \$417,790,967 in 1898 to \$1,106,165,191 in 1907. In 1880 the total value of the metallic products was only \$185,664,163, and that of the non-metallic products \$173,279,135. The value of the non-metallic products surpassed that of the metallic products in 1881, and has kept the lead since, passing the billion mark in 1903.

LADS OF AYRSHIRE, SCOTLAND.

Scotch Boys Reminded a Traveler of American Youngsters.

The carrier's wagonette was approaching. The grand big horse, Mr. Hendry himself, a small, white-haired, apple-cheeked man, with a keen twinkling light in his eyes, and the load of women, babies and boys who filled every part of the vehicle, made a picture

of rustic locomotion, and there was a fine display of courtesy when the boys jumped out to walk. The mothers crowded close together and the babies were allowed to sit on our knees. English country boys, though I like them well enough, do not particularly remind me of American boys; but Scotch boys, especially the barefoot village boys of Ayrshire, reminded me individually of this, that and the other companion of my youth. The eye which never loses sight of yours, the bare, free brow, the freckles, the plucky mouth, the engaging air of freedom and enterprise and humor, in more than one Ayrshire face, brought up the image of a little group of schoolmates, now scattered from Pennsylvania to New Mexico.

The Scotch boys whom I've met on roads and hillsides have always been about some business of their own, and very much interested in its outcome—evidently had something on their minds, some adventure in hand. They were hurrying to some rendezvous or warily returning with fars and cans full of tadpoles or with strings of fish or combs of wild honey.—Scribner's Magazine.

The Center of Love.

"Father Mathew was the most loving and lovable of human beings," and in the light of this statement found in a recent biography of the famous Irish priest, by Mrs. Katherine Tynan Hinkson, two incidents of his crusade for temperance in the north of Ireland should be read.

At Clones, in Ulster, there were two Orange flags raised when he visited it. Instead of considering it as an insult, he thought it a very great compliment, never having seen one or been honored with one before. When he saw them he called for three cheers for the Orange flag. Commenting on this an Irish writer says:

"A Catholic priest calling for a cordial salutation of the Orange banner and a Catholic assembly heartily responding was something almost inconceivable. It had never occurred before in Ireland—I'm afraid it has never occurred since."

For the time being there were goodwill and friendly feeling from one end of Ulster to the other. One recruit who knelt for Father Mathew's blessing said:

"You wouldn't be blessing me if you knew what I am."

"And what are you, my dear?" Father Mathew called men, women and children "my dear."

"I am an Orangeman, your reverence."

"Why, God bless you, my dear, I wouldn't care if you were a lemon-man!"

Apple Superstitions.

In Scotland one of the Hallowe'en customs used to be "eating an apple at the glass." That was to stand before a looking-glass and eat an apple with one hand and with the other comb the hair, when the face of one's future husband would be seen in the glass looking over the left shoulder. In the South of England an apple charm was for each person present to fasten an apple on to a string, after which the strings were hung and twirled before the fire. The owner of the apple which first falls off is declared to be married. As each one's apple falls off, so does the order of matrimony proceed. Single bliss is the lot of the owner of the last apple left on the string.

They Miss Something.

Patience—I see loveliness on postal cards is in violation of the postal regulations of Russia.

Patrice—The country postmaster must have a dull time of it over there!—Yonkers Statesman.