Sheep on Old Farms.

The best mode of renovating old, wornout farms is to raise sheep on them. But in raising sheep the land should be divided into fields and something grown thereon, the crop only reaching a height sufficient for the use of the sheep. The animals should never be compelled to hunt for their food. No profit can be made on sheep unless they receive care and assistance. With the production of wool, mutton and lamb, and the gradual enriching of the soil, the profit is sure in the end. Do not expect too much in one year, but keep on, and good results will surely follow.

Removing a Broody Hen.

There is always difficulty in removing a broody hen, and unless much care is taken she will leave the nest. She ought to be moved in a very low box or basket, with plenty of soft straw to keep her warm. Put false eggs into the basket, and cover her over with a heavy cloth, to keep the light out. If she intends to sit she will, when the basket is uncovered carefully by night—no lamp or lantern—show unmistable signs when you happen around next day. If she does not mean business she will leave her eggs. If she shows a disposition to remain on the nest leave her on the dumb eggs (artificial ones if you have them) for a day or two, and then put good ones under her, keeping her well covered with a heavy cloth till she thoroughly takes to the nest.

Age of a Fowl.

The appearance of the legs is often the readiest guide. A rough, scaly condition is a sign of age. The whole body of an old fowl appears more heavy and mature, and there is an older look about the face and head readily detected by the expert. In males the length of the spur shows the age quite closely. Some poultrymen judge by the plumage. Lift up the wing and push aside the feathers of the sides, when in the case of a young hen you will find a long down, light, close and arranged regularly between the other feathers which cover these parts of the body. Through the skin, which is of a delicate rosy tissue, the small blue veins will be apparent. In a hen over a year old the down and the veins will have disappeared, and the skin be dull white and dry, less smooth and slightly rough and mealy in appearance.—The Cultivator.

A Good Crop to Raise.

Popcorn is a good crop to raise, especially if the grower is able to keep it a season or two in case of low prices. Only the white varieties are suitable for market, as most of the corn goes into popcorn balls, and the nearer white these are the better. The brand of colored varieties is sure to spoil the effect and sale of the popped article. In culture some readily available fertilizer should be planted with the seed, as the young plants are not so sturdy as the sprouts of other corn. A good start does wonders for the crop. Too much hoeing can hardly be given. The drill system is the easiest and most profitable, and three feet between the rows is sufficient. Rice corn, which is the most desirable of any for planting can stand 13 or 16 in. apart in the drill, and do well if the soil is good. Buyers' demands are imperative and must be met. They are that the corn must be at least one year old, to pop well, and entirely free from mold, staining by mice and mice odors, free from silk and husks, and in every way sweet and bright.

Cuttings and Spraying.

Pruning is the secret of successful shrub growing, and in nearly every locality can be found a fair assortment of shrubs and plants whose owners would be perfectly willing to give away the cuttings of each pruning; and cuttings of such desirable shrubs as might not be found in the neighborhood could easily be procured from a nursery for a few cents. I know a young man who has several acres of fine shrubbery, nearly all of which he raised from cuttings procured in the neighborhood. What would have cost him several hundred dollars at a nursery only cost him a few days' labor and some years of waiting. I have propagated thousands of willows, poplars, hydrangeas, altheas, roses, spireas and other trees and shrubs and lost less than 5 percent of the cuttings. Outside of the saving, there is a fascination in raising one's own shrubbery, and if desirable one can easily make it a source of no inconsiderable profit. I know small farmers who add a hundred dollars or more each year to their income by growing a small assortment of plants for local trade. Practical horticulturists are becoming more and more convinced that timely spraying will greatly reduce, if not entirely exterminate, the injurious insects and fungi that have devastated fruits for many years. Wherever practicable, combined fungicides and insecticides are recommended, because of a saving of time, a less liability of injuring foliage; greater efficiency in some cases, and a precautionary measure in others. This spraying should commence very early in the season before the fungi appears. If we wait until their spores have germinated it will be too late. The only sure method is to commence spraying just as soon as the buds commence swelling in the spring. The fungicides can prevent germination by destroying the spores or germs before they have sent forth roots or mycelium, but they cannot destroy the fungus when it has once commenced growth. If the season prove dry and hot it may not be necessary to spray as many times as in a wet season, but fruit growers may as well make up their minds that they must reckon on the cost of spraying as among the inevitable expenses of successful fruit growing. Fortunately, however, it is an expense that is only a profit in disguise, for the direct advantage derived from spraying orchards often exceeds $20 per acre, and for vineyards is much more. The fruit crop of the country would be enhanced many million dollars annually if the practice were generally followed.—Frank H. Sweet in Agricultural Epitomist.

Soiling and Pasturing.

During an interesting experiment in Germany, which extended through 14 years—seven of pasturing and seven of soiling—during the first seven years from 40 to 70 cows were pastured each year, and a separate account was kept with each cow. The lowest average per cow was 1385 quarts during the third year of the experiment, when 70 cows were kept and the highest, 1941 quarts, during the seventh year, when 40 cows were pastured, and the greatest quantity given by one cow was 2933 quarts, the average increase during the last four years being from 1400 to 1941 quarts. The average per cow for the whole seven years of pasturing was 1583 quarts. In the soiling experiment 29 to 38 cows were kept, and the lowest average per cow was 2930 quarts, in the third year of the soiling experiment, when 38 cows were kept, and the highest average per cow was 4000, during the seventh year, with 35 cows. The highest quantity given by one cow was 5110 quarts. The average per cow for the whole seven years of soiling was 3442 quarts. The yield of the same cow is also compared for different years. One of the cows gave during the first year 3636 quarts, during the fourth year 4570 quarts, and the seventh year 4960 quarts. Another cow gave during the first year 3293 quarts, the fourth year 4483 quarts, and the seventh year 4800 quarts. During the summer the green food given was clover and vetches. The most noteworthy feature in this experiment was the great increase in the milk yield of the stall-fed cows from year to year. Not only did the cows remain healthy during the seven years of soiling, but the persistent high feeding, cake and rye bran having been given in addition to the succulent food, produced a steady icrease in milk.—Philadelphia Record.

How Apple Trees Are Fed.

The apple tree may be separated into leaves, wood and fruit. The average yield of a good apple orchard is two hundred bushels to the acre every year of its life. We find that the apples will remove in a year thirteen pounds of nitrogen, only one pound of phosphoric acid and 19 pounds of potash. Figured at the value of commercial fertilizers, 15 cents a pound, I find that the apples remove $2.45 worth of fertility. The figures given in the Cornell bulletin were on a 20-year estimate, and they figured that the production of leaves increased as the tree grew older. I estimate that from one year up to 13 it would remove one-twentieth and have added five years and divided by 25, and got an annual yield of 19 pounds of nitrogen, 5.2 pounds of phosphoric acid and 18.4 pounds of potash removed each year in the leaves. I need not say very much to you about these leaves, but you can see that you can help to prevent your soil from deteriorating by getting the leaves into the ground rather than by piling them up and burning them.

The, trees and leaves draw nitrogen, phosphoric acid and potash enough to make the total value be $9.01 per acre per year of average removal of fertility of an apple crop growing 30 years, I have compared that with corn: Corn removed $9.20, provided you could grow 50 bushels to the acre; but if you count in the corn fodder as being removed, it would remove $10.68 in addition, and, adding the two, it gives up $19.88 an acre, with $9.01 on the apple crop. So you can see that the apples are about half as hard on the soil as corn. Estimating these maximum yields, which are what we want to get at in our farming, in order to see what we miss, I have taken the fertility in the various soils. I have classified the soils and I have taken the average of all of them. I find in the first foot of average soil 35,466 pounds an acre of nitrogen, 5176 of phosphoric acid and 48,181 pounds of potash. That means that such a soil ought to produce apples at the rate stated for 133 years before they would exhaust the nitrogen in the first foot. There is enough phosphoric acid to last 528 years, and enough potash to last 143 years.

This table shows that when an apple orchard plays out at the end of 25 or 30 years it certainly is not playing out because it has exhausted the fertility of the soil, but because it has exhausted the mineral elements of the soil. By faulty methods of cultivation we may exhaust the nitrogen a great deal faster than fruit will take it out. In growing wheat it is possible to remove eight times from the soil, by our methods of tillage, as much as the wheat takes away. You divide those figures by eight, and you find that you are getting down toward the limit of unproductiveness. That is faulty tillage. By adding manure you correct that. When an apple orchard fails to produce, it is not because it has exhausted the fertility of the soil.—Prof. J. W. Clothier in American Cultivator.

The East Indians called rock crystal an unripe diamond.

CLEVER STEVEDORING.

PROPER LOADING OF SHIPS HELPS TO WIN RECORDS.

Wonderful Work of the Man Who Stows Into the Spacious Hold of an Ocean Leviathan the Tons of Freight That Makes Up the Cargo.

One of the things about which the average ocean traveler knows little or nothing is the wonderful work of the stevedore, the man who stows into the spacious hold of a leviathan the thousands upon thousands of boxes and barrels and bags and crates and packages that go to make up the 10,000 or 12,000 tons of freight of a modern steamship. Frequently the stevedore and his army of men have been at work night and day to load the big vessel and to have her start on the very minute on her 3000 mile voyage against storms and whatever else the gods choose to send into the race. But, little as the passengers waving handkerchiefs over the rail may know about the loading of their steamer, the work is as important as it is interesting.

From the moment the last piece of merchandise has been hoisted out of a hold the work of making this ready for the new cargo is begun. Men with fire hose throwing water under high pressure are sent below, and with them go gangs of broom men, who are to clean and scour every part of the big compartment, to get it ready for the delicate and often perishable freight about to be stowed. Standing at one of the mouths of these holds and gazing into the dusky depths below seems like standing on the brink of a hundred foot precipice. In reality, the depth is not so great, being accentuated by the darkness of the pit. But in many of the big ocean liners a line long enough to reach from the roof of a three-story tenement to the sidewalk could be dropped and stretched from the edge of the hatchway without touching the lowest flooring in the compartment. A ton of merchandise stowed in this vast space looks lost, something like a sparrow on a telegraph pole. In fact, thousands of tons will have to be swallowed by the hatchways before the hold will be full, as it should be to give proper balance to the ship.

With the cleaning of the ship the wagon teams begin to appear on the piers, and while these are unloading in a steady parade of vehicles on the water side of the steamship dozens of smaller vessels are moored ready to disgorge their loads into the monster ship. Barges, lighters, canal boats, and craft of all description are on hand to hand over their freight, consisting of everything from coal, which is to be hoisted out of the "canalers," to wheat, which is to be shot into the great hold from the height of a towering grain elevator.

In loading a steamship the first thing is to decide on the distribution of the cargo. In the case of the big freight vessels, where speed and economy of coal is a big factor, grain and other compact and heavy merchandise is not stowed in the very bottom of the hull. It is shipped more toward the centre of the vessel where it will ride easy without, however, doing much to steady the ship. In the case of passenger steamships, where stability is an element and an asset to the owners of the craft, as a rule the heaviest cargo is loaded furthest toward the keel of the ship, where its weight would count like so much ballast in preventing the ship from rolling. When a stevedore provides this stability against rolling he says that he "stiffens the ship." It requires at least 1800 tons to stiffen a big modern ocean liner.

By far the most important contrivance used in the loading of an ocean steamer is the grain elevator, the tall, houselike river skyscraper seen under tow on the lower East and North rivers. As a monster of mechanical perfection, and at the same time a labor-saving device, which has made its influence felt in the very price of wheat, the grain elevator, aside from its interesting connection with ocean steamers, is a wonderful contrivance. This is towed alongside the steamer to be loaded, and at once begins to disgorge a Niagara of wheat or grain into the hold of a vessel. A huge iron pipe, big enough for a man to crawl into, is directed down the hold, and out of it flows a two-foot stream of grain. From 4000 to 7000 bushels of grain are loaded by the elevator every hour. From 12,000 to 18,000 bushels are required to fill the hold of a ship—and every forty bushels of grain are reckoned as a ton.

As the grain is turned into the hold men are sent below with shovels to "trim" the cargo. That means the grain must be shoveled or scooped into every nook and crevice and evenly distributed. Gazing into a hold at a gang of "trimmers" in operation is like looking at men through a fog at dawn. Chaff and dust fly so thickly that unless a beholder is used to the impurities he would choke himself coughing. A passenger vessel would carry from 50,000 to 60,000 bushels of grain loaded in this way. A freighter, built for grain carrying, would readily take twice that amount and even more.

While the grain elevator is at work on one hold of the steamer, the coal barges and the "canalers" are drawn up to the tall side of the vessel and made ready to give up their black, shiny loads intended for the bunkers and the batteries of boilers that will gnaw into the supply at the rate of 400 tons of coal a day. There is no special machinery used to load coal into a steamship. Every pound of it is shoveled by hand into iron buckets, which are hoisted out of the barges by means of block and tackle and steam winches and dumped into V-shaped pockets opening like a funnel out of the side of the vessel. Once dumped, the cargo is stored by gangs of coalheavers on the inside of the ship where the heaps of coal are piled higher and higher until the piles seem like surplus mounds at the mouth of a mine. Time was when coal was loaded "over all," the same as other cargo. But the loading into the sides of the vessels much of the dust and grime incidental to coaling ship is avoided, although even in a few modern steamers the old "over all" method is still used.

But the loading of the bulky cargo is the least troublesome to the stevedore. There are the perishable goods and what might be termed "sensitive" merchandise, which must be considered. For instance, apples and cheese and butter would spoil if loaded near the engine room, where the odor of machine oil is in the atmosphere. Nothing is quicker to absorb unpalatable flavors than butter, apples, and cheese. Before a steamer was three days out none except an Eskimo could enjoy eatables stored near the machinery.

Cured provisions must be loaded as far forward and as far aft in a hold as is possible. The heat generated in the sealed hold of a vessel after the hatches have been down four or five days is something astounding. The coolest places, therefore must be set aside for the most perishable portions of the cargo. All these characteristics of merchandise the stevedore must know and take into consideration. When loading sack flour, he must remember that he is not to pile a heap of smoked hams alongside unless he would have the flour smell and taste of its neighbor and become utterly unfit for market.

Even at that the work of loading a steamer would be child's play to a man who understands his business. But when he really "gets it" is when there is unforeseen delay in a consignment of freight which comes alongside several hours behind expectations. Half a dozen barges loaded with hay, for instance, may be half a day late in coming down the river. Then it means work overtime, night and day, and double or triple or quadruple the number of gangs of 'longshoremen, and never mind the added expense.—New York Times.

THEORY OF GOOD CLOTHES.

All Persons Do Not Wear Them for Ostentious Display.

When Dr. H. J. Davenport, professor of political economy in the University of Chicago, makes the statement that people do not wear beautiful clothes because they are beautiful or artistic, but simply for the sake of making ostentatious display, he is, of course, talking nonsense. The professor did not stop at condemnation of the people who wear beautiful clothes, but went on to denounce those who ride in highly colored automobiles, the Salvation Army on account of its uniform, and everything in the nature of what he calls display.

The average citizen knows enough to discriminate between those who seek display for the sake of display and those who have a real liking or love for everything that is graceful, tasteful and artistic. The average citizen knows well how to differentiate between the gentleman and the dandy, the lady and the snob, the refined and the vulgar. And the average citizen is not at a loss to distinguish at a glance the college professor who talks for the sake of calling attention to himself from the college professor who talks because he has something to say.

A love for the beautiful is inherent in mankind and womankind. The vast majority of people are fond of beautiful things and like to be surrounded with beautiful things, whether they number beautiful things among their possessions or not. It would be as reasonable to say that people keep themselves clean and neat for the sake of making ostentatious display as to say that they dress in the best they can command for that reason.

That there is, always has been, and always will be vanity in this world, nobody will deny, but it is far from being the truth that people in general wear nice clothes, buy handsome furniture or surround themselves with beautiful and artistic things from sheer vanity. Prof. Davenport forgets that there is such a thing as the esthetic sense, and that in proportion as it is developed in men or women do we find them to be advanced in all the ideals that make for the highest intelligence and culture.—Chicago Inter Ocean.

The Deaf Man Scored.

An old man, reputed to be very deaf, entered a country dealer's establishment to purchase material for a suit of clothes. He scon saw what he wanted, but was not disposed to tamely hand over the price demanded. That was not his way. He haggled over the price, and at last the assistant, seeing no other way of making a sale, asked his master if he might make a reduction. The latter spoke up in an irritated voice and with perhaps a touch of bravado, remembering only his victim's inability to hear him. "It doesn't pay," said he; "but let him have it at his price, an' pin him wi' the trimmin's." A bargain was soon struck, the cloth was cut off and the old man put it under his arm. As he took his stick in his hand the assistant said: "By the way, Mr. ——, you have forgotten the trimmin's." "Ou, ay, the trimmin's," replied the deaf one, with a twinkle in his eye. "Oh, weel, ye can jist pin the next ane wi' the trimmin's."—Scottish American.

His Bad Attack.

When a young man gets rid of the idea that he can write poetry he has a bad attack of going in for a public career.—New York Press.

PEARLS OF THOUGHT.

No legacy is so rich as honesty.—Shakespeare.

The wings of youth carry life lightly.—Paul Dubois.

We are immortal till our work is done.—Whitefield.

To know how to suggest is the great art of teaching.—Amiel.

All power of fancy over reason is a degree of insanity.—Johnson.

All governments perish by the exaggeration of their principle.—Aristotle.

To be happy is not the purpose of one being, but to deserve happiness.—Fitch.

Fortune may find a pot, but your own industry must make it boil.—Rousseau.

There is no liberty worth anything which is not a liberty under law—N. J. Burton.

Great minds must be ready not only to take opportunities, but to make them.—Colton.

Curiosity is looking over other people's affairs and overlooking our own.—H. L. Wayland.

Falsehoods not only disagree with truths, but they usually quarrel among themselves.—Daniel Webster.

No man ever did a designed injury to another but at the same time he did greater to himself.—Home.

When a person is down in the world, an ounce of help is better than a pound of preaching.—Bulwer.

The art of saying appropriate words in a kindly way is one that never goes out of fashion, never ceases to please, and is within reach of the humblest.—Faber.

A Remarkable Canary.

Mr. George Henschel of Kensington, London, gives the folowing apparently trustworthy account of a very remarkable musical performance by a canary.

"My sister," Professor Grosse of Brunswick, possesses an old bullfinch which pipes, among other tunes, 'God Save the King' beautifully, even embellishing it now and then with some charming little grace notes. For some time he was the only bird in the house, until about a year ago my sister received the present of a canary bird, a lovely but untrained songster, singing, as they say in Germany, 'as his beak was grown.'

"The cages containing the two birds stood in two adjoining rooms. At first one of the birds would be silent when the other was singing. Gradually, however, the young canary bird commenced to imitate the tune of the bullfinch, trying more and more of it at a time, until after nearly a year's study he had completely mastered it, and could pipe it quite independently by himself. As I said before, this is a canary bird, though a rare accomplishment, is nothing very extraordinary or unheard of. Now, however, I come to my point. What I am going to relate seems to me so wonderful that I should consider it absolutely incredible had I not, with my own ears heard it, not once, but dozens of times within the few days of my visit. When the bullfinch, as sometimes happened, would after the first half of the tune, stop a little longer than the rhythm of the melody warranted, the canary would take up the tune where the bullfinch had stopped and properly finish it."—New York Commercial Advertiser.

The Pirate's Lair.

Now we are approaching the country of the pirates. The bayou branches and branches again, and at one forking place there is a high shell mound, and about its foot a modest extent of land that rises always well above tide water. Here in the old days was Lafitte's chief distributing point. By a dozen routes contraband could be brought from the gulf to one of the cypress-shaded passes that lead hither. And from here to the portages leading into New Orleans the way was safe to follow and easy to guard. Here was the palace royal of the buccaneer chief . . From here to the Gulf of Mexico extended the rule of Lafitte. The shell heaps were his stations. The higher land was settled by his followers. The bayous were his routes of travels and places of hiding. When piracy ceased with the battle of Chatmette his people improved the plantations that existed, and made new ones on every bit of land that rose high enough for tilling. . . It is 35 miles by the most direct baycu route from this point to Grande Terre, on the gulf coast. Yet over the whole persists the personality of Jean Lafitte. It is a strong character. One who has visited Mount Vernon feels that Washington still lives. At Monticello one finds Thomas Jefferson alive in the traditions that connect him with every object. So lives Lafitte on Barataria bayous and on Barataria Bay.—Leonidas Hubbard, Jr., in the Atlantic.

Crow and Hare Fight.

The unusual sight of a fight between a hare and a "hoody" crow was witnessed by a gamekeeper in a field at Whitmuirhall, Selkirk, the other day. The crow made attempts to make off with a small leveret, but at each succeeding rush the hare charged in a vigorous fashion. The fight for the leveret lasted about 10 minutes, when the crow got his intended prey in its beak and lifted it up about 40 feet. The weight seemed too much to be borne off on the wing, and the leveret had to be dropped, when the fight resumed. So intent was the usually wily crow on getting the leveret that it held on till the keeper got within shot and killed the voracious bird.—Westminster Gazette.

England's Food in War Time.

An association of prominent men has been organized in England to force parliament to create a royal commission, which shall investigate the question of feeding England in time of war. The association advocates the old idea of establishing great granaries to hold a reserve supply of food.