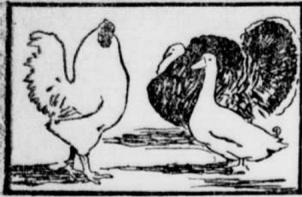


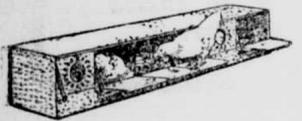
POULTRY



EXCELLENT NESTS FOR HENS

Those Made of Metal Have Much to Commend Them on Ground of Cleanliness and Sanitation.

The use of metal and concrete in the construction of all kinds of buildings is gaining rapidly in popularity. We see it not only in our houses, but in the modern dairy barns and poultry plants. This is brought about on grounds of economy and efficiency; metal is stronger, wears longer, occupies less space, is immune to fire and inimical to insect life and disease. For the latter reason its use appeals strongly to the poultry breeder. Metal perches, nests, and even houses have much to commend them on grounds of cleanliness and good sanitation. Especially is this true of metal nests, a row of which is shown in the illustration. Of all contrivances the wooden box has proved itself the home of lice and mites; its crevices and cracks are the delight of these pestiferous enemies of fowl life. To be sure the nesting material can be changed and burned, the box sprayed or fumigated, but in spite of all precaution a few stray specimens will escape in some crack or crevice in the wood. With the metal nest



Combination Metal Nests.

It is certainly not possible. The only chance of infection is from the bird itself to the nesting material, which is of minor consequence, unless a lousy hen happens to precede a clean one in occupying the nest.

Metal nests come in several patterns. One style is for hanging on the wall, from which it can be easily removed and cleaned. Others are made in combination as shown in the illustration, also in singles and in pairs and trios. For shipping they are knocked down; their construction is such that no rivets or solder is required to set them up ready for use.

Galvanized iron coops have long been a feature of eastern and European shows, and we can see no reason why metal houses will not prove equally desirable. Where tried, breeders claim them a success.

HELP IN POULTRY CHOLERA

Important Experiments With Serum Depend Upon Live Material—Specimens Arrive Dead.

Can poultry cholera be prevented by injecting serum into the diseased fowls? The serum method of treatment prevents cholera in hogs, and if the case is in its first stages, will cure it. But will serum work equally well in combating the disease when contracted by fowls? This is what F. S. Jacoby, of the poultry department, and W. K. Stouder, of the veterinary department of the Kansas State Agricultural college, are eager to know. Of course they will use a different kind of serum, suited to the differences between cholera in hogs and in poultry.

Inability to get diseased fowls to operate upon is retarding the progress of experiments now being conducted to investigate this question. Mr. Jacoby and Doctor Stouder wish to communicate with owners of flocks where the disease has started. The only fowls received up to the present died in transit. Few fowls live more than three days after contracting the disease. If they are not started to the college in the early stages of the disease they are likely to arrive in a worthless condition for the experiment.

Grow Laying Hens.

If you want hens that will lay, now is the time to begin to grow them. Secure eggs of some of the standard laying breeds and raise some chicks as early as possible this spring. Next fall they will be ready for business. Do not expect heavy laying from non-laying breeds.

Don't Crowd Chicks.

Too many chicks in one yard, coop or brooder is disastrous. Older chicks will trample on and crowd out younger ones, and the ones last hatched stand small show for feed growth, or even life. It is best to separate broods widely all over the orchard.

Watch Guinea's Nest.

Guinea fowls will now be laying, and a watch must be kept on their nests, as it is their nature to hide them. The eggs had better be hatched by hens.

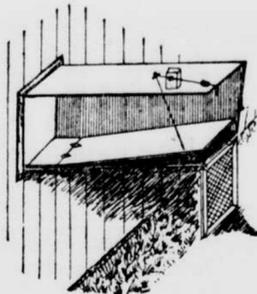
Give Turkey Hen Large Coop.

Give the turkey hen and her brood a coop large enough for the mother to move about and stand erect in, and you won't be so apt to have bad luck.

CAN TURN THEMSELVES OUT

Automatic Door Invented for Releasing Flock Where Poultrymen Forgets It on Warm Day.

The accompanying drawing will need but little explanation to active and up-to-date poultrymen. It is needless to say "the early bird catches the worm." We all know that when the fowls are confined any considerable length of time beyond the time of regular releasing they become much worried, which unfits them for best results, writes J. W. Griffin in the Farmers' Review. A frightened or worried hen soon loses interest in egg production and it requires considerable time and great care to get



Working Automatic Door.

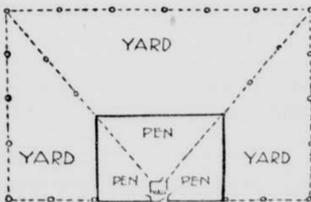
her in proper shape again. Now for fear that you forget to turn the flock from their roosting quarters some warm day, make one of these automatic release doors.

This arrangement is attached to the outside of the building ordinarily where the small drop door is located. This release door should be covered with half-inch mesh wire netting. This will show the hens the light, and in so doing will be induced to reach it. In so doing they will walk over the false bottom, the one to which the trigger wire is attached and her weight will raise the hook that keeps the door in place, the door will swing open and all the flock will be released.

THREE-PEN POULTRY HOUSE

Arrangement Shown in Illustration Gives Large Amount of Yard Space for Chickens.

The illustration shows a very useful poultry house for three pens of fowls, with yards arranged for the same number. The house is 30x30 feet and will accommodate 100 fowls. The hallway takes but little room out of the interior and yet it communicates with all three pens. The inside divisions are of wire netting, allowing the sunshine that enters at one side of the house to fall into the pens; but the house should be so located that three sides may receive morn-



A Three-Pen Poultry House.

ing, noon and afternoon sun. The plan is followed, according to Orange Judd Farmer, for dividing the yard outside as for dividing the space inside the house. This gives a large amount of yard space, with yards conveniently located. This building is shingled all over the outside, with the heaviest building paper under the shingles, and may either be sheathed or lathed and plastered inside.

POULTRY NOTES

The flock of pure-bred fowls more than pays the expenses incurred in the orchard.

Now is as good a time as you can select to give the henhouse a thorough cleaning and disinfection.

Ducks are nervous creatures and will often lose much flesh on account of their nervousness at night.

Keep sharp gravel within reach of the young at all times. Charcoal, too, is beneficial, and oyster-shells are relished.

Once a week pour enough coal-oil in the drinking water to form a scum over the top. It is a good roo preventive.

A carefully made, roomy nest of hay with a sod or grass bottom forms, in my estimation, the best kind of nest for sitting.

The open range is best for young turkeys, but they must not be allowed out during a shower or before the grass is dry.

If an abundance of good sharp grit is constantly on hand the many ailments that spring from indigestion can be prevented.

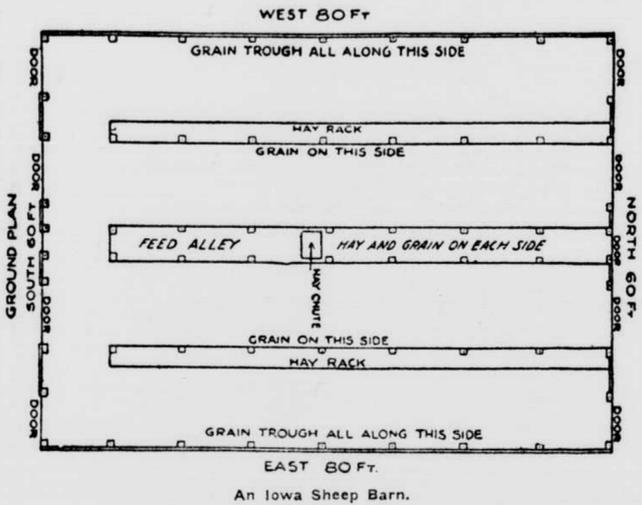
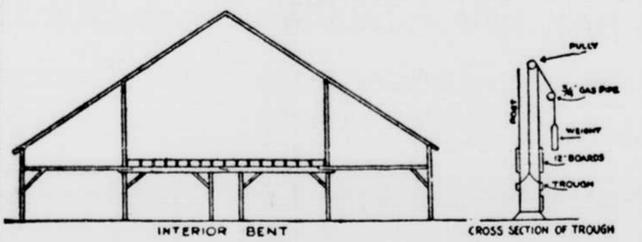
Never allow a draft to blow over young turkeys; cover their windows with poultry netting, then muslin, until very severe weather sets in.

Hard-boiled eggs, stale bread soaked in sweet milk and squeezed until it is crumbly, and sour milk curds squeezed quite dry, are the recognized feeds for the young until they are old enough to eat wheat.

In an experimental way eggs have been hatched in bee hives by a New Jersey farmer, who found that the interior of the hives was just the right temperature

CONSTRUCTION OF IOWA SHEEP BARN INEXPENSIVE

Feedracks Divide Lower Floor Into Four Spaces, as Shown in Illustration—Feedtroughs Are Unique Feature—No Danger of Animal Being Caught.



An Iowa Sheep Barn.

We built a sheep barn in 1905. It is 60x80 feet, standing north and south. The doors are all at the ends. The feedracks divide the lower floor, all of which is used for the sheep. Into four spaces about twelve feet wide in the clear. There are doors nine feet wide at each end of each space to allow driving through with a manure spreader. The end section of each feedrack is left out so that the sheep may pass freely to any part of the barn, writes Lee Colony of Johnson county, Ia., in the Breeders' Gazette. The hay is stored over the central portion of the barn. The haymow is 30 feet wide, leaving a space of 15 feet on each side where no hay is stored. Hay is taken in at each end of the barn. Large gates are fastened by hooks to the posts at the side of the mow, then, in feeding, the gates are moved a little away from the hay, which makes it possible to throw the hay directly into the racks below all along each side of the mow. The hay that is thrown down the central chute has to be carried to the ends of the feed alley.

The feed racks are constructed of boards 12 inches wide placed horizontally. The lower portion is 3 feet wide and one board high. The next board is set in 6 inches and raised up 6 or 8 inches to leave a space for the sheep to reach the hay. The upper part is sloped outwardly. The feed troughs are a unique feature. They are 6 inches wide and 2 inches deep inside. They are made of 1-foot boards. They are not fastened rigidly to anything, but are made to raise and lower. Each trough is 70 feet or 80 feet long. Those on the hayracks are made right in the line of parts; that is, the bottom of the trough is cut out where the post goes through and the sides of the trough pass up and down on each side of the post. Then at each post a small rope is fastened to

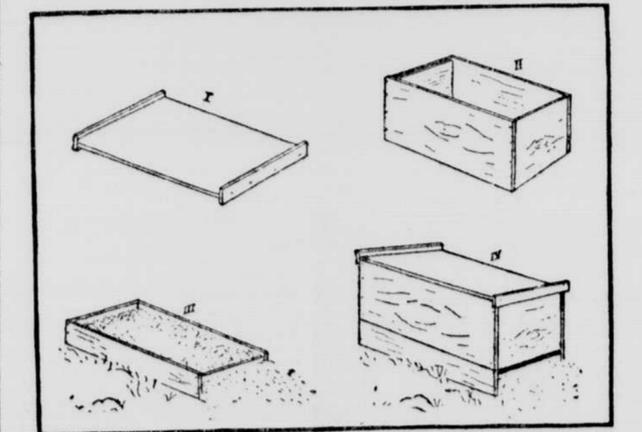
the trough, then passes over a pulley up about 6 feet on the post, then down and once around a three-quarter-inch gas pipe, and then a 15-pound weight is tied to the end of the rope. The gas pipe is one straight line tightly screwed together and placed in brackets so that it is free to turn. There is a crank on one end of the pipe. The iron weight balances the weight of the trough so that by turning the crank the trough can be raised or lowered very easily. Boards 12 inches wide are then nailed on each side of the post, leaving a space of about ten inches through which the trough can be raised and lowered. The inner one of these boards is a part of the hayrack. The grain is fed first and is put in while the trough is up. As the sheep cannot get to the feed while the trough is up, one can take plenty of time in putting out the feed, and then place it all in reach of the sheep in a few moments by lowering the troughs. As soon as the grain is eaten, the troughs are raised and the sheep reach through under the trough for the hay. The lower part of the hayrack comes out even with the outside of the trough, so that the hay rolls out where the sheep can reach it easily. The troughs along the outside of the barn are made in the same manner except that they are placed between two upright pieces. They are just inside the line of posts.

These troughs have been in use for four years. There is no danger of catching sheep under them and choking them to death, but after the sheep become accustomed to being fed in them there is practically no trouble.

Disagree on Perching.

Authorities do not all agree whether a chickens should be allowed to perch early in life or be compelled to squat on the ground.

HIVES FOR ALL EMERGENCIES



I, Hive Cover. II, Hive Body. III, Bottom-Board. IV, Hive in Use.

Generally speaking, cheap contraptions are an abomination in the bee yard, but there are times when something which can be gotten up in a hurry and at a small cost will be appreciated.

In preparing such hives, however, one should see to it that spacing is kept right and nothing but standard frames should be used. Then when you get around to it you can simply transfer your frames to another hive and nothing will be lost, writes L. C. Wheeler in the Michigan Farmer. The hive body can be made by simply nailing four boards together, leaving the ends three-quarters inch lower than the sides. Then form a rabbit by nailing on a strip three-quarter inch wide and three-eighths inch thick on the outer edge of the end boards,

nailing it on with the thin edge up. The hive should be just the right depth so that when the frames are hung in the rabbits they will hang with the bottoms just on a level with the bottom of the hive.

A cheap bottom-board may be made by nailing four strips together, leaving one of the ends an inch lower than the sides and the other end set on the ground and fill with sawdust or clean sand and you have a bottom-board that will serve the purpose just as well as a more expensive one. A very good cover may be made by cutting a wide board just the right length and nailing strips on each end to keep it from splitting. I do not advise such hives for general use, but, as I said before, as a makeshift they are all right.

Why She Lost Patience

"John," said Mrs. Skidmore as she alighted from the train, "if you could just see what our dear son has to put up with!" There was a suggestion of grief in her voice.

"I'll be laid in my coffin," she continued, "I shall never get over the shock of this surprise trip. He was simply inveigled into marrying that girl! Happy! Yes, of course he acted happy before me, but he was bullied into that!" Mrs. Skidmore sniffed.

"Oh, and after the careful manner in which we raised our poor child!" "You see," panted Mrs. Skidmore, as she followed her husband up the station steps, "I was the last person in the world they expected to have drop down on them in New York. But that, and the fact that I reached their apartment in the Bronx at 20 minutes to 10, at night, gave me an insight.

"When I reached New York I did not call them up from the station, but got a cab and went right up to the house. To increase their surprise still more, I did not ring the bell when I found that the janitor had left the vestibule door open. I merely went up. Fortunately, or I never would have known of our poor dear boy's misery—that wife of his had her front door unlocked. So I turned the knob and stood in the long narrow hall which has made the Bronx apartments so celebrated!" Mrs. Skidmore's delicate cheeks were flushed.

"John, I never want to suffer what I went through that minute! They had not heard me enter, and, glancing along the hall to the kitchen at the end I saw—oh, it's too terrible!" Mrs. Skidmore composed herself.

"There was our poor dear son, on his hands and knees! One hand held a soapy sponge that he had been wiping over a very dirty floor! The other—Mrs. Skidmore shuddered—well, that wife of his was airily perched on the sink, smiling down on him, and he had grabbed her ridiculously little hand and he was kissing it! Our poor, poor son!

"Jack could afford to hire a woman just once a week, that wife of his explained when our greetings were over, and she laughed. She had never scrubbed a floor in her life, and Jack was a man, and stronger, so he did it for her. Anyway, Jack loved to do it! Our poor boy, who had never chopped a bit of wood at home in his life or wiped a dish for the maids!

"All that night I tossed and worried! At six the next morning, though I had strict injunctions not to get up till I was called, I went into their two by two living room. Presently who should come in but Jack, hat and coat on and in his arms a paper bag and a bottle of cream! My dear, think of our poor Jack going out for a bottle of cream!

The delicatessen store was only four blocks off, and Charlotte did so love fresh sugar rolls for her breakfast! My coming had necessitated the extra cream, it seems. He had also a little dab of chipped corn beef. With a broad grin he left me and made for the kitchen, where he percolated coffee—for Charlotte! He set the table and arranged it! Then he called her and she appeared with her hair in a braid and wearing a rose pink dressing gown!

"Think, John, to come to that after the way we always dressed for breakfast, after my making the girls prepare bacon for Jack each morning, because he was so fastidious! After the years of breakfasts of golden brown toast which he absolutely demanded!"

Mrs. Skidmore bit her lips. "John," she said, weakly, "when breakfast was ended, our poor boy washed the dishes, he swept the floors, he made the bed!" Mrs. Skidmore's voice was weak with horror. "And that wife of his had been playing the piano in the meanwhile!

"By that time it was necessary for him to leave for work. He kissed my cheek in a pecky fashion and, taking that creature in the hall, said good-by to her for eight minutes by the clock! She takes her lunch in a grill near by. They get dinner in a Bronx cafe. And our poor boy—"

Mrs. Skidmore reached for her husband's hand. "John, our poor boy is blissfully, madly happy with that girl, working like a slave for her, denying himself everything for her!" There was silence for a moment. Then Mrs. Skidmore smiled through her tears.

"Yes, John," she said, "that's the way we were, as you say. But what gets me out of patience is the way we pampered Jack for 28 years when he'd have been just as happy without it."

Why the Pretzel Twists.

The pretzel is capable of infinite possibilities in the matter of shape. It shows almost as many forms as do the leaves of trees. The construction of the pretzel may not be inaptly described in sailor terms. Its peculiar shape is attained in this way: A bight is taken in a roll of dough and the ends are given a half twist and brought back upon the opposite sides of the bight. This process gives to the pretzel a heart-shaped appearance, but no one ever ventured to hint that any sentimental reason existed for assigning this shape to such a prosaic thing as a pretzel. When the pretzel has been duly "varnished," it is subjected to a process of salting, and the thing is complete. —Harper's Weekly.

God Uttered His Voice; the Earth Melted

By PASTOR RUSSELL of Brooklyn Tabernacle

TEXT—We will not fear though the mountains be carried into the midst of the sea.—Psalm 14:2.

I have chosen for my text a sea topic, a symbolical prophecy which, I believe, is rapidly nearing fulfillment. All Bible students recognize the fact that many of the Psalms are Messianic; that is to say, they apply to the time of the inauguration of Messiah's Millennial Kingdom. Some of them detail the peace and joy and blessings which will then prevail among men, when the great leveling processes of that time will raise all the worthy poor and degraded and will humble all the proud, establishing society under such new conditions that the new order of things is symbolically styled in the scriptures "a new heavens and a new earth, wherein dwelleth righteousness" (II Peter iii, 13). Others of the Psalms describe in highly figurative terms the work of the Millennial Age. For instance, we read:

"Therefore will not we fear, though the earth be removed, and though the mountains be carried into the midst of the sea." Fear is the great torment of the majority of our race. It is the lash which the adversary frequently uses to drive away from God those who need his sympathy and love and succor. To such the Lord speaks tenderly saying, "Come unto me, all ye that labor and are heavy laden, and I will give you rest." And again, God declares his name to be Love and says, "Their fear toward me is taught by the precepts of men"—not by his word (Isaiah xxxix, 13). He would have us trust him as a great, loving, generous father, saying, "Like as a father pitieth his children, so the Lord compassioneth those who reverence him" (Psalm ciii, 13). As love, more love, perfect love, comes into our hearts it more and more casts out the fear which the adversary would inculcate and which has burned into men's minds and consciences the "doctrines of devils," to which the apostle refers (I Timothy iv, 1).

The fact that the scriptures prophetically describe the overwhelming of the social order and the great governments of the earth must not be understood to signify that the Bible counsels revolution or anarchy. On the contrary, all of God's people throughout the scriptures are counseled to live peaceably with all men, so far as possible. They are counseled not to use carnal weapons, not to take to the sword for the settlement of disputes, but rather to suffer injury. They are counseled that God is the great Over-Lord, and that although he is not now ruling directly amongst men he is fully the master of the situation in that he could at any time overthrow all opponents. He does not acknowledge that his will is now done in the earth, but tells us that it will be done by and by and encourages us to pray and to hope and to wait for it. He tells us that Satan is now the "Prince of this world" by virtue of the fact that he deceives the minds and hearts of the majority. God would have his people understand something of his great program, but he would keep this hidden from all others; hence the impossibility of explaining spiritual things to a carnal mind (I Corinthians ii, 14). "None of the wicked shall understand." (Daniel xii, 10).

The great creator has contented himself with such a supervision of human affairs as leaves much responsibility in human hands. He merely interferences to raise up or to cast down on occasions when the interest of his cause and program may demand. For instance, the case of the Pharaoh, raised to the throne of Egypt, in Moses' day. God there raised to the throne a man of great determination, and hindered from reaching the throne other men not so favorable to the carrying out of the divine purposes. Thus, without interfering with the free moral agency of the king, God used the wrath of man to praise him and the remainder he restrained. Similarly, God previously raised Joseph to the governorship of Egypt for his own purposes.

We are not of those who would harass the minds of our fellows with fear. Rather we would point them to the fact that behind this cloud of trouble there is a glorious silver lining of millennial joy and blessing for all the families of the earth. Rather we would encourage all who have the hearing ear to zeal and faithfulness in their consecration, that they may "make their calling and their election sure" to a share in the kingdom glories and "escape those things coming upon the earth" (Luke xxi, 26). In a word, the gospel of Christ is not a message of damnation and fear and torture, but, as the angels declared, "Good things of great joy which shall be unto all people" (Luke ii, 10).

Beginning with the sixth verse the Prophet gives a brief synopsical picture of the time of trouble and its consummation and the inauguration of universal peace. "The heathen (Gentile peoples) raged!" These words describe the tumult which will prevail amongst humanity in the great time of trouble before the climax is reached. "Raging," angry voices arise from public meetings, and in the more private meetings of the lodges of labor and capital, and through the columns of the press to the extent permitted. In Germany the "raging" press for some time has been muzzle!