A Scholarly Discourse By Rev. David J. Burrell, D. D.

***************** New York City.—"A King in the Pillory" was the subject of a strong sermon preceded by the Rev. David James Burrell, D. D., L.L. D., Sunday in the Markle Collegists Church, Fifth avemue. The text was from I Kings xii:2:
"And it came to pass when Jeroboam,
the son of Nebat, heard of it (for he
was in Egypt), that they sent and
called him." Dr. Burrell said.
In reading the chroneless of the Kings

In reading the chronicles of the Kings of Israel we came upon the name of Jeroboam, and it is almost always mentioned in these terms, "derobeam, the son of Nebut, who made Israel to sin. This is repeated no less than eighteen times with weary retteration. Jero-boam has stood in the pillory three thousand years, with that placard over him. Why is be thus branded and dis-

At the time of our context he was fiving in Egypt. He did not belong there. He was a Jew; a widow's son, distinguished as a civil engineer. He had begun at the foot of the ladder, tending a hand with pick and shovel in the repairing of the fortifications of Milo. The eyes of King Solomon fell upon the tall, broad-shouldered couth and, admiring his industry and cleverness, he promoted him step by step until he was made superintendent of public works, and placed in charge of thirty thousand men. His ambition grew with his advancement; and thus it length, temptation overcame him He was like many others of whom we say, "They cannot bear prosperity." At this time in Israel there was much discontent, owing to royal luxury and ex-travagance, and to excessive taxes and governmental Impositions. engineer was approached by the mal contents, and became involved in a conspiracy. Solomon got wind of it, the conspiracy collapsed, and Jeroboam field to Egypt, where he was now living In impatient exile.

At the death of Solomon the smolder-

At the death of Solomon me smaller ing fire burst into a flame. His son Rehobeam refused to listen to the Rehobeam refused to listen to the complaints of the people, saying: "My father chastised you with whips, bu I will chastise you with scorplons.' The ten tribes assembled and resolved on secossion. The cry was raised: "To your tents, O israel?" And we should be the last to find fault with them since the state of affiles was much what it was when our forefathers came together in Independence Hall, and drew up a notable project beginning, "When in the course of human events it becomes necessary for one people to dissolve the political bands which have connected them with another," etc. When the question areas as to who should be the leader of the ten tribes all eyes turned to Egypt; and Jeroboam was sent for

He had longed for that message, and hastened to answer it. He was probably not more than a formight on the The Israelites had consumed forty years in the same journey, when they came up "out of the house of their boundage," but Jeroboam's feet were winged with ambition as theirs were not. What drames and visions stimulated him! The crown beckened

He met the assembled people at He met the checken and was formally mangu-checken and was formally mangu-ated. "God save the King?" The ized at last. What an opportunity was now before him! What an outlook, if

only he would reign in the fear of God. But, alas, he began in the wrong way. Thinking only of personal advancement, he left God out of the realconing. That was a desperate blan-der. His reign of two and twenty years is briefly summed up in three sines all of them due to what Spensor calls "the sacred hunger of an amb His first sin was amilest God to

critical up the golden railves. From the standpoint of a goldess king this was cood policy. He reasoned thus: "The aw requires that the people shall go o Jerusalem to attend the tiero annual If they do this, refugn to their former allogiance. of worship; and where better than at Dan in the north and Bethel in the south, both consecrated by sacred asco-ciations. As we cannot have the ark of the covenant, we must decise some other visible symbols of the presence of God. And what better than two golden culves, with faces like those

of the mystical figures over the ork?
The shrines were dedicated accordingly and the royal produmation wen
forth, "These he your rods, O. Israel!" From the standpoint of mere state, craft this may have been "good polley," but it was had religion. Any form of Idelatry is offensive to God It is not necessary to set up a golden calf. We may make an idea out of wealth or pleasure or honor. We may frame an biol out of our imagination. All gods are false, except the One who

has revealed Himself in His word as the true God. And anything is an idol which is served or honored more than we serve or hopor Him. The second an of Jerobeam was against himself. He was warned twice, but refused to head it. On one occasion; as he stood beside the after presuming to hurn increase the after unknown and unnumed prophet stood beside him crying, "O alter, shart time saith the Lord: A child shall be been

who shall destroy the priests of the high places and burn men's bones upon thee!" And when Jerobeam stretched Firth his hand and cried, "Lay hold an him?" his hand was palsis that he must needs outrest the Lord On another occasion his son, the heirapparent, being desperately ill, the king knowing the futility of praying to the golden calves, sent his wife in disgulae to the prophet at Shiloh,

she approached the prophet's door he cried, "Come in, thou wife of Jerobeam! Why feignest thou thyself to be another? ' have heavy tidings for thee. Go tell Jerobonm, Thou hast done evil; therefore, I will bring evil upon thy house, for the Lord bath

All warnings were lost upon this nan. God did the best He could for for him, as He does for every inceterate stoner. He warms, promises, entreats in vain. He sends blessings innumerable, then chastiscments, sorrow, adversity to no purpose. Like Jero-boam, being wodded to his sins, they upon the bosses of the shield of

The third sin of this man was against the people. His infinence was like the upas tree; and they sat under it. He issued a 'made Isrnel to sin." proclamation requiring them to bow at the idolatrous shrines; and during all the subsequent history of the ten tribes his baneful shadow was over them. They had fourteen kings, before they were led away into exile, and there was not a godly man among them. One after another they took their pinces in the pinory beside him being characterized on this wise, "Who followed in the steps of Jerobeam, the son of Nebat, who made Israel to sin."

But why do we have the record of these sins? Would it not have been kinder to pass over them in silence? In the Assembly Hall of the Military Academy at West Point you may see the portraits of the various captains who have commanded there. One place. however, is left blank; it is the that should have been occupied by Ben edict Arnold, the traitor. The picture of Jeroboam might in like manner have been turned to the wall, but for the fact that the relteration of his sin carries a great lesson with it, namely, the perpetuity of influence. "No man livth unto himself and no man dieth unto There are three kinds of in himself. fluence which every man exerts; and we may wisely consider them.

The first is voluntary. The sins Jeroboam were not inadvertant; The sins of meant to have the people worship the There are others who do like ately. wise; thieves, rum sellers, dive keep ers, managers of Sunday theatres, put veyors of unclean literature and au-thors of infidel books; these do evi with malice aforethought. Not content with ruining themselves, they plan to ruin others. To all such the word of the Master applies: "It must needs be that offenses come; but woe to that man by whom the offense cometh. It were better for him that a millstone were hanged about his neek and that te were drowned in the depth of the

But there are multitudes who do good and intend to do it. The world is full f them; teachers of truth, "sisters of " life savers and philanthropists speak the seasonable word "which is like apples of gold in baskets of silver," and who engerly stretch forth the helping hand. To such the word of the Muster applies, "Inasmuch as ye have done it unto one of the least of these, we have done it unto Me."

The second kind of luftuence is auto matte. And this is by far the largest force in life. For influence does not wait to be exerted, it exerts likely thether we will or not. I used to go fishing for trout in a clear stream among the Pocono Hills; but when I was last there the waters were dul and dark, and my errand was vain, The man who had built a paper mill up allove did not mean to kill the fish; evertheless, the refuse had effectually complished it. John Mills, who ranslated Chambers Encyclopedia Inte French in 1743, was moved by nothing worse than the thought of personal gain. But when, with that end in your, he enlisted the services of Vol-tuire, Rousseau, Dilerot and others of that infidel group, he set in operation forces which fifty years inter brough on the Reign of Terror. It is thus that men do evil without intending it.

The third kind of influence is pos-thunous. A man who had lived an evil life said on his deathbed, "I wish you could gather up my influence and bury it with me." Alas: that could not be. His body might lie in the sepui-ples and his means be forestern had other and his name be forgotten, but "the evil a man does lives after him."

Of all the things that followed Jerobeam not one was so alive as Jerobeam limself, though he had been "gathered unto his fathers;" for through Nadab and Baasha and Ela and Zimri and the others be was still

naking Israel to sin. And the influence of right-living men is likewise immortal; "they do rest from their labors, but their works do follow them." The odor of the spike nard, with which an unknown woman once anolated the feet of Jesus, has ome down through the centuries, her leed being told "as a memorial of her." So the dead are really the living. are guided by the memory of these whom we have "loved and lost awhile." Goodness is "proof against the tooth of time and the raisure of chilylon." If a fixed star were to be a superfection of the design beauty that the design of the superfection. extinguished in the distant heavens, would be a inillion years before the people of this world would discover it -its light would still be shining on-,

For years beyond our ken. The light be leaves behind him lies. Upon the paths of men.

The lesson is plain. Let us look to But how? The secret of doing good is being good. Can men gather gampes of thomas or figs of thistles? "A good man out of the treasure of his heart bringeth forth good fruit." Our influence is never better than our character, and charactee has its seat and centre in the heart. If we would set ourselves right in the matter, the first thing in do is to come to Christ, that we may rid ourselves of sin, and all the rest is following Himthin, to believe His tenehing, to do His work and to be like Him. Light earnor help singles is some in the like Him. eannot help shining. It sounds no trumpets, waves no banners, makes no announcement of its coming, but just comes. "Let your light so slune before men that they may see your good works and glorify God."

O may I join the choir invisible Of those immortal dead who live again In mords made better by their presence;

In pulses stirred to generosity.
In decis of daring recticude, in scorn
For miscrable since that end with self.
In thoughts sublime that piece the night

And with their mild persistence urge man's To vaster issues,

The Bud and the Blossom.

There is not such a great difference between grace and glory after all, Grace is the bud and glory is the blossom. Grace is glory begun, and glory is grace perfected. It will not come hard to people that are serving God down here to do it when they go up They will change places, they won't change employments. D. I.

trish Moss as a Medicine. Irish moss is used as a foundation

for many desserts in the distary kitchens where especial dishes are prepared for invalids. An authority on the question of seawoods states that scurvy, the dread of sallors caused by the absence of potash in the salt meat which forms a part of every ships provisions, would be ameliorated by the liberal use of the seamous felly, which is rich in potash. Irish moss has always a place in the medicine chest of the old-fashioned house wife, who pins her faith to its healing properties for colds, sore throats, etc. -Leslie's Weekly.

Bavaria Supplies Skeletons.

Trade in human skeletons, which is a regular business with certain houses is most active in September, when the medical schools and colleges open for the year. While some skeletons are obtained in this country, the great bulk of the supply comes from Bavaria, and the price rules high or low as the death rate in that country moves up and down.

EPWORTH LEAGUE LESSONS

SUNDAY, MAY 6.

Our Call to Service .- John 15. 16; 1 Cor. 1. 27, 28.

Every true call is from God. knows us—our powers, our peculiarities, our limitation. Knowing us, he calls us. Who are we, that we should refuse? We can refuse. True enough; but what life is worth living if it is being lived in opposition to God's de-sire? Such a life has lost its inner springs of joy. There is no confidence in it, no power, no lasting good. Better to be a vessel of dishonor, in the world's eyes, than to be a broken vessel, unfit to serve man because unwilling to serve God.

All power comes through obedience to the laws which control it. The engineer has power by the use of steam, because he obeys the laws which control steam. Let him disobey them, and he not only loses his power, but he invites disaster. The sailor trims his sail to the wind if he would hasten his voyage. So God's power is at the disposal of everyone who is willing to If the life is really submitted to God he will work through it, and it will be, in the highest sense, a suc

Wherever you find the record of a life which has done great things for God, you find that it has been a life definitely joined to God's me by faith It has not measured its tasks by its own weakness, but by God's strength. To believe that God will afways give power to do all he requires of us is to live the victorious life.

God is in no such haste that he seeks to use unprepared people. man once said, "I care not how late I come, so I come fit."

When a man starts unready on God's work he soon gets tired. That explains the reformer who needs reformation, the preacher who succeeds better in business, the evangelist who has broken down, and the nominal Christian who is taking a permanent vacation from Christian work. These have seen no vision, have felt no com-pelling incitement, have heard no

voice of promise and power. There is no rest for anyone whom God has called to service until the call is obeyed. The desector cannot rest He knows his place is with the army He is trying to hide from the authori He is never safe from detection and exposure so long as he lives un-der the flag. He uses more energy avoiding his duty than he would need to do his duty. God has giver us our right work, our best work. we but see it, and attempt it with alour strength, our life will be lived at its best. Otherwise our better life will never begin. No worker works sc hard as the shirker, or gets so little

CHRISTIAN ENDEAVOR NOTES

MAY SIXTH.

Among the Wheat or the Tares: Where am 17, Matt. 13, 24-39,

The wheat is the rule, the tare the exception, in every field.

If the church keeps awake, its field will keep clear—of tares and all other evil.

The tares are more prominent than the wheat, because their heads are empty,—there is no grain to pull them over, So with men.

"Judge not" is a command for all nes, and especially for the times when judgment is obvious and easy. Suggestions.

If you are sure you are the only wheat-stalk in the field, you are quite certainly a tare. The kind of Christian Christ re-

joicer over has no time for hunting up the sins of others. We are to make men better where

This parable does not mean that unworthy members may not be expelled from the church; but it must be ione only under the sure guidance of

Hlustrations.

The best way to get rid of tares is to crowd the soil full of wheat-

No farmer fears to earlich his farm saying, 'So much the more food for the weeds." He does not intend to have weeds.

it is the abandoned fields that grow up with worthless plants; they are the business of such fields, the accidents of tilled fields.

The farmer knows that he may make a mistake in sowing his field, and sow some weeds; but he sows.

Quotations. If the wheat does not seek to change the tares into wheat, the

wheat will degenerate into tares. - F. Peloubet. Where evil is clear and open, we may not hesitate to deal with it; but where it is questionable, we had better hold our hand till we have fuller guidance.-C. H. Spurgeon,

Wild Board Runs Amuck.

Wild hoar are always a trial during hard weather in the forest districts of France. About thirty of them have been killed in the Tarbes district during the fortnight; the other day a powerful boar absolutely wrecked the local fair at Arreau,

Somehow it strayed among the stalls, and its uneasiness at the surroundings soon became a furious panic. The beast rushed wildly at random, hither and thither, knocking people down, scattering the fair booths and their contents in all directions. and before it got clear of the place it had completely wrecked the fair.

Then it plunged into the river to swim across, but was pursued by a crowd armed with revolvers, pitchforks and hatchets and was overpowered and killed before it could clear the water.--London Dally Globe.

Uses Old-Time Methods. P. H. Wilson of Embden, Maine, is evidently a farmer of the old school. Using an old-fashioned flail, he threshed out eighteen bushels of oats in four hours.

An Expensive Ornament.

"That man is a good player, but he has a regular baseball cabal to contend with " "That is to say he has a big dia-

mond ring on hand."

THE SUNDAY SCHOOL

INTERNATIONAL LESSON COMMENTS FOR MAY 6.

Subject: The Parable of the Tares, Matt. XIII., 24-30, 36-43-Golden Text. Gal. vi., 7 - Memory Verse, 30 - Tople Problems of Good and Evil.

1. The parable (vs. 24-30). 1. The sowing (vs. 24, 25). 24. "Another parable." Josus saw that this mode of Jesus saw that this mode of teaching was the safest and most im pressive method for the general public. "A man." The "man" represents the Son of Man (v. 37). He alone is the source of all good seed. "Good seed." In the parable of the sower Jesus said the seed was the word of God, in this He said, "The good seed are the children of the kingdom" (v. 38). sows nothing but truth; His children are converted through the truth. "In field." The field is the world (v. The world is His field. When Christ comes to take possession of that which is His own. 25, "While men slept." In the night, when evil-disposed persons would try to injure the property of their neighbors. "When professors were lukewarm and pastors indolent." His enemy." "The enemy that sowed them is the devil" (v. 39) The enemy Notice that Jesus refers to him as "His" enemy. The devil is not only the enemy of Christ but of all who follow Christ, "Sowed," A kind of injury frequently practiced in the East, from mailce and revenge, "Tares," This is literally "daruel," the weed that grows The tares discovered (vs. 26, 27)

26. "Brought forth fruit." Their real difference was seen when the fruit ap-Compare Matt. 7:16-20. is a great deal of secret wickedness in the hearts of men, which is long hid under a cloak of a profession, but breaks out at last, 27. "The servants." The faithful and vigilant ministers of Christ, "Said unto Him." They disame with grief to tell the Lord about It and luquire into the cause. "Whence tares." Only good seed was sown, and we may well ask how have these tares This is a question which been asked ever since the days of Job.

The hurvest (vs. 28-30), 28, "An onclusively that there is an active, in telligent, personal devil. Those are in error who teach that the devil is only a winciple of evil in man. "Hath done this." God made men, as He did angels, intelligent creatures, and coasequently free, citier to choose good or evil; but He implanted no evil in the human soul. An energy, with man's concurrence, bath done this. Darnet in the church is properly hypocrites and wicked persons which Satur introduces into religious societies in order to destroy the work of God and thus further his own designs. "Wilt thou," etc. Here is another question which has agitated the church for ages—a question as to the right of discipline Let us remember that a rash zeal is as much to be feared as lax discipline. 29. "He said, nay," God's thoughts are not our thoughts; we oftentimes act very unwisely when we do not ap-ply to Christ for direction.

30. "Let both grow together." Both will grow together, and it is God only who knoweth the hearts of men and would be able to separate the righteous from the unrighteous, "Until the har-"The harvest is the end of world" (v. 39). The judgment day: werm (v. as). The magnetic day; the time of summing up the accounts of the world. A final and complete separation will certainly be made at that time. "I will say to the reapers." The angels are the reapers (v. 39), but they are under the direction of Christ, into whose hands all things have been given. "In bundles." Some writers think there is an intimation here that in eternity sinners will be put together "according to their sinful propensi-ties." "To burn them." The wicked

will be punished.

II. The interpretation (vs. 36-43).

Jesus alone with His disciples (v. 36).

36. "Into the house." This had been a very busy day, and on that same evening Jesus crossed the Sea of Galliee with His disciples; but before they did this they evidently retired to their place of abode in Capernaum for rest refreshment. When alone they

asked Him to explain the parable An explanation of terms (vs. 37-37. "Sen of Man." No doubt our I claimed the title Son of Man. which was already given Him in the Old Testament (Dan. 7:13). 38. "Field is the world." This parable explains the entire structure of the system of probation under the Christian dispenation. It describes the struggle with evil in the world until the judgment "Good seed." Clean wheat rep resenting the truths of the gospel and also those who embrace those truths God's children are the seed. "The tares," etc. The wicked are called children of the devil because their sinful natures have been brought about through his agency. 39. "The reap-

crs." Those who do the divine will.

3. The end of the world (vs. 40-43).

40. "Tares—burned." That which is worthless will be destroyed. Fire is a common figure in the New Testament to describe the retributions of the wicked. The wicked will be destroyed, out not annihilated, "End of this world." The day of judgment, when Christ will come and the probationary

atate will end. "His kingdom." The world is here regarded as belonging to Christ, "That offend." Those who cause others to sin, as well as those who are mix wicked, shall be east into hell. The figures of this verse express the terribleness of the end of a lost scul. 43. "Then." When the probationary state has ended, and when the wicked and every evil thing have been "Shine forth." A picture of "Ears to bear." The one whose mind is open to the truth, and who is ready to obey. All have ears, but all do not have ears to hear.

Wonderful Dragon Tree.

The dragon tree of the Canary Islands is believed to be the oldest living vegetable organism in the world. The age of one tree, in particular, the once famous dragon tree of Teneriffe, has usually been estimated to be from four thousand to six thousand years, having thus an antiquity comparable with that of the pyramids. This wonder of the plant world was seventy feet or more in hight, and survived intact until the year 1819, when during a terrific storm one of the large branches was broken off. A similar storm in 1867 stripped the trunk of its remaining branches and left it standing alone. This tree derives its common name from a reddish exhudation known as dragons blood, found in the sepulchral caves of the Guanches, and supposed to have been used by them in embalming their dead. It is said to have been at one time an important article of export from the Canaries, and has never fallen entirely into disuse

The Larm

for human food is of great importance also impart an agreeable flavor.

Horse Radish Culture.

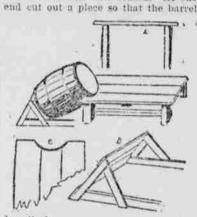
Horse radish does well on any kind of soll, but best in rich, moist ground, A sandy loam, well enriched with deomposed stable manure, will give fine clean, straight roots; on clay soil the roots are apt to fork and "finger." The rows are made twenty-four inches apart, and sets are planted eighteen inches apart in the rows; no other cultivation is required but to keep the ground clean. As it is a late crop it is usual to grow some other crop as an early crop, between the rows, and put the rows two and a half feet apart. Beets of an early kind are excellent to grow with the horse radish in alternate rows, as they do not make large tops. Horse radish is entirely hardy, and can be left safely in the ground all winter but it is best to harvest the roots and keep them in pits.

Killing Vermin on Pigs.

A matter that should have careful attention in raising pigs is the bedding and sleeping quariers. They should have warm, dry pens with ample vendiation. The bedding should be changed twice weekly and the pens well cleaned out. Before replacing the bedding a little lime, sprinkled about the floors, or a good distufectant should be used. See that there is no vermin on the sows or in the pens; if there should be drive them in the pen and sprinkle with any of the "hog dips" or with crude petroleum. This will free them after three treatments at intervals of a week apart. To thoroughly get rid of vermin the remedy should be applied vigorously and the floor and all parts of the sleeping pen should be sprayed and all old, infected bedding burned. - Farming.

Butchering Appliance.

Much of the disagreeable work of burchering on the farm might be avoided if one would take the trouble to have the necessary conveniences. First build a low and strong platform. It should be made of lumber faced on the top side and made extra strong by cross pieces underneath. The legs short, stout and well braced. At one end cut out a plece so that the barre



described may rest in the opening. A curve in the platform cut for the a half feet of this material. scalding barrel, figure B the form of Indianapolis News.

Shade Important.

Now, the tree-planting time is at hand, every poultryman should endeavor to plant a few fruit trees near the poultry house, not little, small twigs, which will not furnish shade or fruit for several years, but the largest that can be found.

There are many kinds of fruit trees that will bear the second year, and the fruit will add to the profits of the poultry yard.

Plums, especially the new Japanese varieties, are very fine, while cherries, peaches and apples all do well,

If the orehard has already been planted it will be better to arrange the poultry houses so that the fowls will secome accustomed to staying there. There is no better place for them, and they will keep the insects away from the trees.

What's a Good Potato?

Most people, I suppose take it for granted that the best potatoes are the ones that contain the most starch, says a writer in Garden Magazine. On the contrary, it is the ones that contain the most gluten, because gluten is an albumineus food, and starch is much cheaper than albumen.

Now out a potato open and look at the small Illustration and we shall learn something worth knowing about this gluten.

First comes the skin of the potato In a new potato it is thin and clear, while a etrky skin indicates a mature potato, and one more likely to be menly. Second s a thin layer varying from

one-eighth of an inch to one-half an inch in thickness. This is the gluten. Third comes the largest part of the potato-the starch. If this is very dense the potato will be mealy, but if non-uniform the potato will be of poor quality.

Fourth is the very centre of the tuber which contains little starch and a great deal of water. If this area branches out into the starch the potato will not be a good cooker.

Chemicals on Old Pastures.

A series of very interesting experiments in pasture renovation have been eight years, and the general results are ing all of the best.

The food that animals consume a general way with experiment; in this modifies the character of their flesh, country. The experiments were in the Turnips yield a peculiar flavor to mut- line of pringing up the quantity and ton. The flavor of mutton from sheep quality of pasture by topdressing with that have lived upon the highland is chemicals. On a light soil potash prodifferent from that of sheep which duced but little effect. On heavy soils have obtained their food chiefly from phosphate fertilizers were most profitthe lowlands. The garlic of the mead- able. The topdressing was not profitows and some fragrant herbs modify able for the first three years, but after the flavor of the meat. Oily food tends that period lime proved profitable, and to make the fat soft. Hens partly fed potash was also profitable the last two on scraps of decayed meat yield eggs years. Nitrogen fertilizers proved of that are at once unpleasant to the taste little use. The great advantage of the and unhealthy. Feeding the animals phosphate fertilizers and lime was to promote the growth of various kinds of and demands experience. It is not clover, which resulted in improvement enough that food makes fat-it should of the soil and the stand of various grasses. Fertilizers containing both phosphates and lime proved very effective, especially on heavy soils, which generally contain enough potash to

Breeding Partridge Cochins.

tient in lime and phosphoric acid.

last a number of years, but were defi-

Although Mr. Mitchell's residence at Bristol, Conn., is right in town, he has demonstrated that it is not necessary to have a forty-acre farm to raise fine birds. His poultry house is a model for neatness, and the second story is entirely arranged with individual pens for setters as well as pens for mated birds. It is equipped with incandescent electric lights, so that the birds can be seen to good advantage in the evening.

These birds are the result of years of line-breeding in a systematic manner that has, and is, producing birds so perfectly finished that one simply wonders at their perfection.

Mr. Mitchell is both a fancier and a naturalist. His labors toward perfection have been persistent, and he has consistently followed a line marked out for himself from the beginning. The result was shown at New York last winter when he showed four generations, and every one of them was a

prize winner. I saw over 100 birds on the place. They were youngsters, and all roosted on a bed of sand, except the more forward ones, and they had pens especially prepared for them. Their roots were but a few inches from the soft sand. Now, here is where development of the Cochin comes in. Leaving aside feed, they were handled as all Asiatics rhould be-quietly and close to the ground. As soon as they are in good feather they are placed in the training coops and taught to pose and to be handled. That involves labor, but it wins many prizes .- J. H. D., in the Massachusetts Ploughman.

How to Make a Hot-Bed.

The location of the hot bed is an important matter. It should be on welldrained soil, well sheltered from wind and fully exposed to the sun. It should be near the house, for convenience. Fresh manure from the horse sta

ole, mixed with litter from bedding, is the material most generally made use of to furnish the heat needed in the hot-bed. A pile of this material is spread on the place selected for the hoted, covering an area somewhat larger han the hor-bed itself is intended to e. It is thrown on the ground in layers of a few inches in depth. Each layer is trod down firmly before another is mided. The pile should be finished off by rounding it over. Leave It in this condition for a few days, until fermentation sets in. This can be told by a warm moisture which will be seen rising from it. It should then be forked over, shaking out the long straw as this is done, and making another trong brace is made in the form of a days it will again give evidence of furframe, in which the barrel is used ther heating. After this it is in condifor scalding purposes. At the rear tion for final disposition in the bed. of the platform a scaffold is erected. As the manure is now thrown into being simply a strong place of stud- shape it should be packed down well, ding mounted on heavy posts set into making it as uniformly compact as posthe ground. Figure C shows the sible. There should be about two and

It is now ready for the frame. This construction of the brace set back of should be put in place and covered with the barrel and figure A the scaffold.- sash. Bank up well outside the frame with the manure. Allow the sash to remain in place until strong heat is generated. When this begins to decrease, and the thermometer does not register more than eighty-five or ninety degrees, cover the manure inside the frame with about 6 inches of fine, rich soil, worked until it is in the mellowest possible condition. The bed is now ready for use.-Eben E. Rexford, in "Making the Country Home," in the Outing Magazine.

Hipts For Poultry.

A good egg will sink in water. With the dust bath the hen cleans her body.

Sitting hens should not be fed while on the nest. Growing chicks should be protected

from the sun. The nest must occasionally be renewed and kept clean.

Road dust, with fine sifted ashes, makes a good dust bath. Cleanliness and vigilance are the best

preventives of disease. As a rule fowls will keep healthier if they have a good range. A dark comb is an indication of a

congested state of the system. There is more profit in marketing fowls early than at any other time. Now you who have attended the poultry shows and who have found out that you did not know it all, can you

An aid to making fowls lay in cold weather is to heat their grain before feeding, but do not get it too hot, as fowls have been killed that way. After cleaning your poultry house

not improve the next season?

thoroughly and using crude kerosene oil in all the crevices and on perches, then litter the floor with straw and chaff. The festive lice still give their atten-

tion to the fowls, notwithstanding ion will be retained, part of it being oiled perches, etc. A good dose of insect powder is about the only thing that will rout them.

It is poor pelicy to sell all your best birds, even if you can obtain a good price, for while you obtain more ready money you are not improving your stock, and your birds will deteriorate carried on in England for the past each year as long as you practice sell-



The latent image-the undeveloped photograph-is an electro-chemical for mation of molecular nuclei, around which the visible image is subsequent ly built up by development.

When the glass plate of a photographic negative is scraped free from film and cleaned chemically, nothing remains visible, but on breathing on the glass the photographic image may be brought out again as a faint gray and white positive.

Twice as much heat is generated by X-rays in lead as in zinc. The only explanation evident to the discoverer is that certain elements are broken up by these rays, and that the energy libs erated from these atoms forms a part of that appearing when the rays are absorbed by matter.

The automatic gas kindler and ex-tinguished of Herr Raupp, of Mayence, based upon the singular effect of light in increasing the electric conductivity of selenium. With the coming of daylight, the selenium permits the ready passage of an electric current. and this causes the shutting off of the gas, which the apparatus turns on again and ignites as darkness comes again. The selenium, of course, is shielded from the light of the burning

The powers of the stomach have been gauged hitherto by means of a test breakfast and the subsequent use of the stomach pump, or less directly by chemical test of the urine. A new method is being tried in Europe by Dr. Schwartz. He administers a large pll! of a third or a half ounce of subnitrate of bismuth enclosed in a coating of connective tissue from the sheep or ox, and when examination is then made with X-rays, this subsequent as made with X-rays, this substance shows as a dark shadow. At first it appears as a deep black spot. As digestion progresses, however, it disseminates through the stomach, and in health gives a faint shadow of the entire organ in about seven hours. In such disorders as deficiency of acid. pyloric disease and cancer, the black spot persists nine, eleven or even twenty hours, while in hyperacidity the too rapid digestion may cause the spot to disappear in two to five hours.

A toxine of the blood of eels and allied species, preventing congulation of poisoned blood, was discovered by M. Mosso as long ago as 1889. The toxine has not yet been isolated, but late in vestigators have found that the eel serum retains its toxic nower for a considerable time in the dark, but that the degree of toxicity varies with the individual cel and with the season. Like snake venom, the toxine appears to be active only when entering the blood, being harmless when swallowed. An anti-toxine can be produced in the blood serum of susceptible animals, and this renders rabbits and goats immune against great doses, though little effect is produced on guine pigs.

Experiments made by G. F. Becker and A. L. Day on the linear force exerted by growing crystals have brought out interesting facts. They found that crystals of alum are able to form in a saturated solution, in opposition to the pressure of a heavy weight, which they must lift. This linear force of, growing crystals is of geologic importance, for it has been found that pyritic crystals formed in slate rock are able to drive apart the laminae of the perceptible deforn tion of the crystals.

FORESTS ON RESERVES.

How the Government is Restoring Denuded Mountains and Wastes.

The area now finder forest in the West is less by millions of acres than the area suitable for forest growth. In the first place, fire has destroyed an enormous quantity of forest, denuding mountain slopes so completely that forest renewal by natural means has been rendered impossible for nges. Again, vast areas, scores of millions of acres, like the chaparrel lands of Southern California, which once bore forest growth but long since lost it. must remain indefinitely unproductive wastes unless brought again, by planting, under forest. Moreover, the demand for timber, even, the local demand, cannot long be supplied from the reserves unless they are developed to the highest productive canacity. and, for this, forest replacement and extension, quite as much as conservative logging, are essential. Finally, the indirect use of the reserves is not less impressive. The vital importance of water for irrigation would, in the case of several of them, alone, suffice to render forest planting on watersheds imperative. In Southern California forest extension on the mountains is strongly favored by public sentiment, at almost any expense, because it is water, not the supply of fertile soil, which limits agriculture, so that land worth \$2000 an acre with water could hardly be given away without it.-United States Agricultural Bulletin.

Germany in China.

There comes from Berlin an interesting echo of the terrible events which six years ago necessitated the pouring out of European troops into China. Few persons are probably aware how large a proportion of those troops still remain in China. Great Britain withdrew the bulk of hers several years ago, but several of the Continental powers are only now beginhing to follow her example. Germany still maintains a brigade on a war footing at Tientsin. An order has, however, at last been issued for its withdrawal, and the force will embark at the end of April. But a battalmoved up to Pekin for the protection of the Legation, and part retained as a reserve at Tientsin.

Artistic Paris.

Paris can teach us much in matters relating to art. There is art every-where—art in every public building and in every street railing, says the