

[Mr. Wrage inv.tes contributions of any new ideas that readers of this department may wish to present, and would be pleased to answer correspondents desiring information on subjects discussed. Address M. J. Wragg, Waukee or Des Moines, Iowa.]

REPORT OF AMERICAN POMOLOG-ICAL SOCIETY.

The American Pomological Society convened at Kansas City, Mo., Tuesday, Sept. 19 to 21, and was one of the largest gatherings of pomologists and scientists that has ever met in that convention city. It represented the best talent in scientific and practical horticulture from all of our best agricultural colleges, as well as those connected with the experiment stations and the Departments of Agriculture at Washington. In the absence of President J. H. Hale of Connecticut, Capt. C. L. Watrous of Des Moines, Ia., acted as chairman through the deliberations of this body. The first day's meeting was largely taken up with address of welcome of the mayor and responses, together with the president's address and the report of the different officers and chairmen of committees. The city of Kansas City royally entertained this notable assembly.

Americana Plum.

On Wednesday, Sept. 20, the program proper was taken up, with the first discussion on the Americana plum. It was opened by Prof. Albert Dickens of the Kansas Agricultural college. He said that we may hope only through the breeding up of the type of plums with a strong marking of the native to get varieties that will stand in many places over the arid Northwest. The consensus of opinion was that it was the best family of plums to plant over the large area of the Mississippi valley, and north of the 40th degree of latitude. Prof. Troupe of Indiana said that many of the varieties of the Americana were perfectly adapted to his state, and that there was an increased planting of some of the best varieties. Several

and high quality of fruit. Pruning. top, as in the apple at two years old; bearing only on the outside or terminal branches, would set fruit through the tree. Thus the trees could more easily bear up under the heavy crop apples one year with another. The of fruit and not break, as the weight is more evenly distributed.

Perfect Apple. On Wednesday the report of the their report. Mr. Williamson of Illinois, chairman of this committee, was asked while on the floor to give a definition of a "perfect apple," or one firstclass, to grade No. 1 on the markets. "Normal in shape, normal in color; free from worms, with no break in the skin. Must be han d picked and free from fungus; must range in size from 21/4 to 21/2 inches in diameter at

Orchard Management.

heavy drain on the water supply that | and better ones can be produced. if not protected, and the evaporation lessened by a cover crop, your fruit

would necessarily be smaller. Mr. J. A. Burton of Indiana said that crab gathering was the election of its offigrass in his large orchards made a perfect covering; was easily mowed tofore this society has always met in down and retained moisture and gave the soil the proper conditions. He believed that orchards should be cultivated during their first few years, and then seeded with some cover crop. He did not advocate high culture, but believed that the orchard required attention all the time to get the best results. Some of the figures that Mr. Burton gave as to the great value of commercial orcharding follow: "In my orchard I had 110 trees of Grimes Golden, from which I sold the fruit for \$1,700, being an average of \$15.50 per tree." One can readily see from these figures that it pays to take care of the orchard; give it proper care, good culture, for when given this it becomes one of the most remunerative investments that one can make.

Reliable Trees.

Prof. Morris of Oklahoma, discussing in his paper the source of trees for orchard planting, said that the unsuspecting public were often made to suffer from the irresponsible tree dealer. He gave many instances to show how men had been unfairly dealt with in procuring their trees, not getting what they ordered. He cited one instance where he knew a party had gone into the woods, dug up willows, cutting them back and shaping them and shipping them for peach trees. They were planted out and grown one year before the owner was aware of the treatment that he had received. It was only more evidence of what has already been said in these columns that the ordinary farmer and fruit grower should only buy his trees and plants of his home nursery, or of parties that he knows are reliable.

Spraying the Apple Orchard. Prof. Pollard of Nebraska, on the subject of spraying, said that it is who spoke on their value for Colorado | the only way to get a fruit crop one | adapted to the different soil and cligave as their opinion that this family year with another. He gave as his matic conditions of our country. While inders 100 feet long or more. In these of plums, which constitutes such varie- opinion that if spraying was properly in the northwestern states like lowa the poles are subjected to live steam ties as the Hawkeye, Stoddard and done at the right time and with the Wyant, and the Chickasaw varieties, | proper mixtures we may expect a good Wild Goose and others, were doing crop of fruit with ordinary conditions eties of high quality, we can grow in well, and that the increased planting as we would a crop of corn or any abundance Kieffer, Flemish Beauty, of these hardy varieties during the other cereal. For the codling moth, Duchess, Clapp's Favorite and many last few years was marvelous. Prof. which is one of the great enemies of Little of the lowa Agricultural college | the apple, he recommends four pounds believed that from the best improved of paris green to 50 gallons of water. self; perfect air drainage being one of varieties any one who planted and For eating insects and for protecting the essentials of success. gave proper care would be abundantly the foliage from fungous diseases, he blessed with good crops and fruit, and only added Bordeaux mixture, as given received award for the largest exhibit that from these selected varieties we in the regular formulas. Prof. Beech may hope to develop a breed of varie- of lowa said that in spraying what was five plates of different fruits originated ties of high excellence; both as to proper for the apple would be detri- by cross-breeding. He may well be longevity of tree and hardiness of bud | mental and injurious to the plum foliage. Mr. Dunlap of Illinois, who is is one of the few men that is building one of the large fruit growers, said a monument to horticulture in his mod-Following this discussion was that that one of the essentials of spraying of pruning of the different fruit trees | for profit was doing it at the right and the peculiarities of climate on time. In giving his experience he said pruning. There were many different he had found that the early spraying. opinions expressed, but the weight of before the leaves had opened, had althe evidence was that pruning was ways given the best results. Then one of those operations that should be you could get your spray compound practiced early in the life of the tree. more evenly distributed over the tree Its outline and centour should be before the foliage was in the way. The formed with the first pruning of the Hon. Parker Earle, who is one of the veteran fruit growers of this country, open tops, so as to give circulation of said that after years of experience and air, and the letting in of sunshine was trying the many formulas for spraying, considered absolutely necessary to he had found that arsenite of lead had high-grade fruit. B, this method given the best results and that it was greater bearing surface of tree could the only thing that he was using in be secured, so that instead of the tree his orchards, for the codling moth and for the canker worm. He claims that you can keep your orchard free from

formula given of the arsenite was three pounds of arsenite of lead to five gallons of water. Many advocated the use of desperine, but it was proven committee on grading the exhibiting that this compound was the same as Garcia. His exhibit was composed fruit was taken up, but the committee | the arsenite, and was used at the rate | largely of grapes of the "mission asked for further time for making of five pounds to 100 gallons. After type," but showed conclusively that hearing much discussion on this ques- they were in the favored spot for bringtion from different learned men we ing the grape to perfection. He also believe that we would recommend the made a large exhibit of Bermuda using of the lead compounds for the onions. The professor is demonstratcodling moth and the canker worm. Training the Grape Vine. Prof. Munson of Texas gave a valu- try can be made very profitable. He able paper on the growing and train- grows the onions from seed in "flats." ing of the grape vine, demonstrating transplanting them to the field in rows before the association his method of 15 inches apart and four inches apart

Its widest part to be in the No. 1 training the vine. It was by placing in the row, so that at time of maturity every six or seven rods. On each is | ered with these beautiful large, white The subject of cover crops came in a cross-arm about three feet long fitted onions. for much discussion. The most suc- on the top. He trains the vine on a cessful fruit growers advocated some string for each vine until it gets high kind of a cover crop. In Missouri it | enough to reach the wires that are stawas cow peas, vetch, clover or any ples on this cross-arm. This allows plant that would completely cover the the vine to spead out each way, makground, giving uniform moisture and ing a perfect arbor, so that it can be of limes, lemons and other citrous keeping the soil from drying out. Many easily tended and allows good ventila- fruits, which gave strong proof of the argued that the developing and maturition through the vineyard. By this ing of the crop of fruit was such a method he claims that more grapes brids.

Goodman President. One of the main features of the closing and last session of this notable cers for the next biennial period. Herethe East, and as natural its officers were Eastern men, who knew but little of the possibilities of the great Mississippi valley. It was very fitting that at this election a man of the prominence and experience of E. A. Goodman of Kansas City be elected as its president. He is one of the men who has had more to do in commercial orcharding and in horticulture in all its branches than any man we know; he has been for twenty-five years secretary of the Missouri Horticultural so-

Prof. Craig was elected secretary by unanimous consent, and also Prof. L. R. Taft of Michigan for treasurer.

Brainy Men.

Never before was there such a collection of brainy fruit men as were found at the program of this meeting, and we only regret that space will not permit for going into detail with the different addresses and papers read.

Medals Won. The following were given the Wilder medals, which is the highest honor that this society confers upon its ex-

Missouri State Horticultural society for its extensive exhibits of apples, pears and plums. Those who helped make the great Missouri exhibit were M. O. Cole of Springfield, G. T. Tippin, S. H. Jenkins and Ozark Orchard company and others. While this was an "off year" in Missouri, yet the display of highly colored fruits was magnificent and showed great care in selection and arrangement.

The firm of Ellwanger and Barry of Rochester exhibited 127 varieties of pears. While all parts of the country are not perfectly adapted as this section for pear growing, yet it was demonstrated that there are pears fection Bartletts and Seckles and variothers. It is a question which each must decide and experiment for him-

Mr. C. G. Patton of Charles City also from his state, containing over fortycalled a "Wizard of Horticulture." He est way that but few realize. He has already originated varieties of apples that are perfectly adapted to any good orchard soil in Northern Iowa or Southern Minnesota, varieties that will grow and bear much luscious fruit.

A few exhibits of fruit were merely given honorable mention, such as the exhibit of the Ozark Orchard company at Goodman, Mo., and the Kansas Agri-

Approved Varieties.

In looking over the exhibit from Nebraska and in talking with the main men from that state, they all agreed that the following were the best varieties of apples to plant, both for home and commercial orchards: Salome, Windsor, N. W. Greening, Grime's them with the assurance of a crop of Golden, Wealthy, Jonathan, Gennet.

Bermuda Onions. We must not close without making

mention of the vine fruit display from New Mexico, which was made by Prof. ing that there is great areas of land in his state where the Bermuda indusheavy posts three feet in the ground, the ground is almost completely cov-

Hybrids. The Department of Pomology at Washington, under the direction of Col. Bracket, made an extensive exhibit of some of the newer hybrids in varieties prepotent element shown in all hy-

HONEY BEES AND THE ORCHARD. | lose sight of the fact that to spray

It is a question whether or not that open is largely fatal to a crop of fruit a sufficient quantity of honey bees -that is, if the spraying is effectual, allowed to visit the orchard blossoms which, in the majority of cases, we will do more good and be the means | think is not; but in many cases it is, of producing more fruit than spray- owing to the material used, and the ing the trees in the ordinary manner, conditions under which it is used. as carried out even to the most sys- Effectual spraying of fruit blossoms tematic and scientific plans. We are will kill all insects visiting the blosinclined to favor the bees, and for our soms, thus preventing the fertilization the apple-grower, because here man home for some time in the middle of part have given the job into their of the same, or largely weakening the uses his art and skill in attempting to the summer, and when I came back ands entire. While spraying in the same. If you are a fruit grower, it control some of the most exquisite proper season does not conflict with | will pay to experiment a little; and the work of the bees on fruit blos- if you try honey bees to the numsoms, yet some people are foolish ber of about two or three colonies for enough to spray their fruit trees when each acre or orchard you have, you in full bloom, thus defeating the very | will be as well pleased with the reobject they desire to obtain. If any- sult as many others have been. Bees one is not thoroughly acquainted with | will, aside from this, pay you for their the tables laid down for spraying fruit | keeping, so that it will cost nothing trees, they should not spray at all to have them work your fruit blosuntil they are posted. There is perhaps not an agricultural to them thus early in the spring.

paper published but is able to furnish any fruit grower a table or the necessary information as to spraying fruit | narrly produce better crops than a trees to receive the best results (if | good soil, poorly worked; but for wholgood results are to be received from ly satisfactory results there should be in the straw and watch the poultry this practice). No one should ever bein good land and good work.

fruit blossoms when the blossoms are soms, but will be quite advantageous

A poor soil well worked will ordi-

THE CROSSING OF APPLES.

Pomologists of the United States have written volumes on the hybridization, or crossing, of apples in order to produce new varieties of commercial value suited for growth in the climatic and other physiographic conditions of this and that section. Hybridization is a charming employment for of hinder them. I was away from workings of nature. Scientific crossing is done by using a camel's hair presence of the weeds in my current brush to take the pollen from the b'os- | patch less obvious to the neighbors. som of one variety of apple and impregnating the pistil of the flower of another variety. The fruit formed from this blossom is a cross of the two varieties. The seed of this is planted. Sometimes the grower, in this way, hits upon a fine apple, but there are a thousand failures to one

Thies is a good time to save some millet seed for winter feeding. Put it hustle for it.



Fungus Attacks on Telegraph Poles. The length of service of a telegraph or telephone pole is determined in a section of the pole not more than a foot or a foot and a half long. In a standing pole this section extends about six or eight inches above and below the top of the ground. This is the universal point of attack upon the life of the pole, and is called its breaking point. Decay is the archenemy of these poles. It sets in at the ground line and reaches both up and down the pole, but only so far as the conditions exist which promote the growth of wood-destroying fungi. few inches below the ground there is lack of the necessary oxygen and heat, while at about the same distance above ground the requisite moisture The exact time at which decay begins its work depends upon the climate, the character of the soil and similar conditions. In a hot, moist climate it ordinarily sets in with great rapidity. But at best, in a very

few years after the pole is set the struggle has commenced. The decay soon girdles the pole and gradually eats into it deeper and deeper until it is so weakened that it breaks under the weight of its equipment.

The strain upon the pole from wind pressure and the weight of its crossarms and wires is calculated for the ground line. When the diameter of this ground line is constantly decreased, the strength of the pole is proportionately reduced, and it becomes only a question of time when the pole must fall. Chestnut and white cedar have been found, among available woods, most successfully to resist decay; but the life of the former is only from twelve to fifteen years, and

of the latter ten to twelve years. The co-operative study of the bureau is for The experiments already made by the United States Forestry Bureau show conclusively that poles can be subjected to a preservative treatment

which insures materially lengthened service. This treatment consists in impregnating the wood with antiseptics which prevent the growth of the fungi that cause decay. The treatment of telegraph and telephone poles, when attempted at all in this country, generally has been applied to the whole pole, requiring the use of air-tight cylpressure applied to force it into the wood. Manifestly this is a laborious process. Yet for telegraph and telephone poles only about one foot of the entire length needs to be made immune from fungus. If this foot at the fatal ground line can be preserved from decay, the rest of the pole will take care of itself. Experiments will now be made in treating the butts of the poles for a distance of about eight feet, thus carrying the antiseptics just beyond the zone of decay attack. The creosote method will be used and dead oil of coal tar forced

through the butt of the pole. The telegraph companies have made little use of preservative treatment. They employ millions of poles on their various lines, and it would be a tremendous economy to add even a few years of service to the life of each pole. But there will be another large saving both to them and to the forest through preservative treatment. To provide a good margin against decay. poles are now much larger than deaway a furrow around the pole at the ground line, and the diameter of the pole at that point is gauged to allow perhaps 12 to 8 inches, and that below 8 inches the weakened pole falls, the course to be pursued is obvious. Antieffectiveness, the starting of decay, and thus permit at the outset the selection of an 8-inch diameter rather than a 12-inch. The 4 inches saved represent a tremendous difference in the size and age of trees used for poles. Both the companies and the by this economy, with its shortening | Therefore he wants a cow with a beef of the length of time necessary to

Coal Ashes as Mulch.

I have believed for many years that coal ashes make a good mulch, and I still hold to the opinion, but with some modifications. It is true that the ashes will for a time prevent the growing of of the season. But in the ashes weed seeds will ultimately grow up and develop enormously. I might say that if ashes are put on a piece of ground not appear during that year, for the reason that the seeds of weeds will not have time to fall upon the ashes and sprout before cold weather comes. But the next year, look out.

Last winter 1 put ashes between my rows of current bushes as well as between my rows of strawberries. The ashes were spread on fully six inches deep, so deep that I thought it impossible for any weed to push through. During the first part of this summer the weeds did not appear, but after midgummer showed a sudden vigor. those weeds were five or six feet and I had to pull up the stalks to make the

In my strawberry patch the result and in addition every strawberry runner that got onto the ashes sent down a good system of roots and developed plants right amid the ashes. I am gong to follow the matter further and see how deep I will have to pile the coal ashes to prevent the growth of DuPage Co., Ill., in Farmers' Review. | put into the oven.

The man that has a good many milch cows knows the advantages of having always on hand a large supply of good feed. One of the great obstacles in the way of successful dairying is the unevenness of the season. Some years there is an abundance of pasturage and an abundance of grass in the meadows, which is made into cheap and nutritious hay. But there are other years when the pastures are dry and consequently short, and the crops in the meadow are so small that before the winter is half over the farmer has to buy feed or sell part of his cows. Too often the profits of one season are eaten up by the losses in another season.

As a usual thing the farmer or dairyman that is caught short on his feed tries to keep along by feeding straw mixed with ground feed. He imagines that he is saving the loss that would be occasioned by the purchase of hay at fancy prices. In fact he is losing heavily in the feeding of such makeshifts, for the amount of fiber that has to be digested is so abnormally high that the little nutriment in the straw costs too much to make it pay to try to get it out.

How much better for the farmer to have always on hand a large supply of a nutritious feed such as silage. There are years when the weather conditions are such that an immense amount of silage can be grown on a small area of ground. Some of our enterprising dairymen carry silage continually in their silos, and when the corn crop of one year is being harvested they are still using silage from

the lot put in the preceding year. The more silos built the better is it for the man that is trying to conduct business profitably. Doubtless silage carried for two and three years will be found to be as good as silage used the purpose of extending, if possible, at the end of a few months. One dairyman tells me that he prefers silage a year old for his cows and that they always drop on their milk yield when he changes from old to new silage, showing that they find the old silage the more digestible.-John Stinson, Bureau Co., Ill., in Farmers' Review.

Small Flies in Milk. thip my milk to the city, usually sending about four cans. One day, a few weeks ago, I received all the cans back because in one there were a number of tiny flies, hardly visible unless they were in great numbers. I left badly to have every can returned when only one was at fault, for I had taken great care with my milk and rather prided myself on my cleanliness. Just how the flies got in the milk I do not know, for it was all carefully strained and then put in the tank to cool, and fresh water pumped in. Whether the flies were in the can, or whether they came while the milk was in the water cooling, I do not know, and I have wondered if other farmers have been troubled in this same way. At any rate. I made up my mind that there would be no more flies in my milk. so now I use two sets of cans, and after I take the milk from the cooler, I strain it again into clean cans. I have had no further trouble with the little pests, although it means some more work and a double number of cans to be use i.—S. E. Langworthy in Farmers' Review.

The Combination Cow.

There is incessant warfare between the specialists in cow breeding and the man who wants a cow that is both manded by the strain upon them. It a beef-maker and milk-maker. First is expected that decay will quickly eat | the combination cow was called a general purpose cow, then a dual purpose cow, and now some one has hit upon the name given above. While for this weakening process. When it the specialist is right in some things, is known that decay, in a certain num- he is wrong in others. Certainly the ber of years, cuts the diameter from | man that is producing milk with the idea of selling it must produce that milk from the cow that will make it as cheaply as possible, and this he will septics prevent, for the time of their | find among the distinctly dairy cows. But there is a place for the combination cow. On the high priced land in Illinois and adjoining states the man who is producing beef cattle is learning that it is impossible to make money by producing beef cattle alone. He must utilize the milk-giving power owners of forests will be great gainers of his cows as much as possible. form and deep powers of milk-giving. These kinds of cows are in existence. They are not suitable to go into the dairy, but are suitable as an adjunct to beef making.

> Anthrax Among Cows. Not long ago a man that

has a large herd of weeds, especially during the early part | and peddles milk in the city of Nashville, Tenn., discovered that many of his animals had anthrax. The board of health took up the matter and had the diseased cows slaughtered and in the summer the weeds will probably | their carcasses burned. The rest were vaccinated and a rigid quarantine maintained for a time, with the hope of preventing the spread of the disease to other herds. Anthrax is a most deadly disease and is communicable to man. As soon as it appears in a neighborhood every precaution should be taken against it. If the animals are buried they should be surrounded with quicklime, that is, unslaked lime, that all germs may be destroyed. If the carcasses are buried without this precaution the germs will work up through the soil and the grass The ashes then seemed to help instead | and other animals feeding there or eating the dried hay cut from that place will take the disease.

Vaccination for Anthrax.

There has been an outbreak of anthrax in Rome, Italy, and the veterinarians have been vaccinating according to the Pasteur method was the same. The weeds grew up for preventing the spread of the disease. The results were fairly good with small doses. The work was effective when combined with the careful destruction of all carcasses of animals dying of anthrax.

Almonds in gingerbread give it a weeds. I am sure, however, that coal | fine flavor. Make the gingerbread with ashes are a great help for a few weeks, dark molasses, blanch some almonds, but they will not accomplish much as chop them up coarsely and scatter a permanent destroyer.—Albert Bates, over the gingerbread just before it is

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