

TALMAGE'S SERMON.

A TALK FULL OF THE SUMMER SPIRIT.

"Go Forth into the Mount and Fetch Olive Branches and Pine Branches and Myrtle Branches and Palm Branches to Make Booths."—Neh. 8:15.

(Copyright, 1901, by Louis Klopsch, N. Y.) Washington, Sept. 1.—This discourse of Dr. Talmage is full of the breath of the hills and fields and is a summer sermon; text, Nehemiah viii, 15, "Go forth into the mount and fetch olive branches and pine branches and myrtle branches and palm branches and branches of thick trees to make booths."

It seems as if Mount Olivet were unmoored. The people have gone into the mountain and have cut off tree branches and put them on their shoulders, and they come forth now into the streets of Jerusalem and on the house tops, and they twist these tree branches into arbors or booths. Then the people come forth from their comfortable homes and dwell for seven days in these booths or arbors. Why do they do that? Well, it is a great festival time. It is the feast of tabernacles, and these people are going to celebrate the desert travel of their fathers and their deliverance from their troubles, the experience of their fathers when, traveling in the desert, they lived in booths on their way to the land of Canaan. And so these booths also became highly suggestive—I will not say they are necessarily typical, but highly suggestive—of our march toward heaven and of the fact that we are only living temporarily here, as it were, in booths of eternal rest. And what was said to the Jews literally may be said figuratively to all this audience. Go forth into the mountain and fetch olive branches and pine branches and myrtle branches and palm branches and branches of thick trees to make booths.

We Need Olive Branches. Now, if we are today going to succeed in building this gospel arbor we must go into the mount of God's blessing and fetch the olive branches, and whatever else we must have we must have at least two olive branches, peace with God and peace with man. When I say peace with God, I do not mean to represent God as an angry chieftain, having a grudge against us, but I do mean to affirm that there is no more antagonism between a hound and a hare, between a hawk and a pullet, between elephant and swine, than there is hostility between holiness and sin. And if God is all holiness and we are all sin there must be a treaty, there must be a stretching forth of olive branches.

There is a great lawsuit going on now, and it is a lawsuit which man is bringing against his Maker. That lawsuit is now on the calendar. It is the human versus the divine, it is iniquity versus the immaculate, it is weakness versus omnipotence. Man began it. God did not begin the lawsuit. We began it. We assaulted our Maker, and the sooner we end this part of the struggle, in which the finite attempts to overthrow the infinite and omnipotent—the sooner we end it the better. Travelers tell us there is no such place as Mount Calvary, that it is only a hill, only an insignificant hill, but I persist in calling it the mount of God's divine mercy and love far grander than any other place on earth, grander than the Alps or the Himalayas, and there are no other hills as compared with it, and I have noticed in every sect where the cross of Christ is set forth it is planted with olive branches. And all we have to do is to get rid of this war between God and ourselves, of which we are all tired. We want to get back out of the war, we want to get rid of this hostility. All we have to do is just to get up on the mount of God's blessing and pluck these olive branches and wave them before the throne. Peace through our Lord Jesus Christ!

Health for Mind and Soul. But my text goes further. It says, "Go up into the mountain and fetch olive branches and pine branches." Now, what is suggested by the pine branch? The pine tree is healthy, it is aromatic, it is evergreen. How often the physician says to his invalid patients: "Go and have a breath of the pines. That will invigorate you." Why do such thousands of people go south every year? It is not merely to go to a warmer climate, but to get the influence of the pine. There is health in it, and this pine branch of the text suggests the helpfulness of our holy religion. It is full of health—health for all, health for the mind, health for the soul. I knew an aged man who had had all the diseases you could imagine. He did not eat enough to keep a child alive. He lived on a beverage of hooch. He lived high, for he dined every day with the King. He was kept alive simply by the force of our holy religion. It is a healthy religion—healthy for the eye, healthy for the hands, healthy for the feet, healthy for the heart, healthy for the liver, healthy for the spleen, healthy for the whole man. It gives a man such peace, such quietness, such independence of circumstance, such holy equanimity. Oh, that we all possessed it, that we possessed it now! I mean it is healthy if a man gets enough of it. Now, there are some people who get just enough religion to bother them, just enough religion to make them sick, but if a man takes a full, deep, round inhalation of these pine branches of the gospel arbor he will find it buoyant, exuberant, undying, immortal health.

But this evergreen of my text also suggests the simple fact that religion is evergreen. What does the pine branch care for the snow on its brow? It is only a crown of glory. The winter cannot freeze it out. This evergreen tree branch is as beautiful in winter as it is in the summer. And that is the characteristic of our holy religion. In the sharpest, coldest winter of misfortune and disaster it is as good a religion as it is in the bright summer sunshine. Well, now, that is a practical truth. For suppose if I should go up and down these aisles I would not find in this house fifty people who had had no trouble. But there are some of you who have especial trouble. God only knows what you go through with. Oh, how many bereavements, how many poverty, how many persecutions, how many misrepresentations! And now, my brother, you have tried everything else, why do you not try this evergreen religion? It is just as good for you now as it was in the day of prosperity. It is better for you. Perhaps some of you feel almost like Muckle Backie, the fisherman, who was chided one day because he kept on working, although that very day he buried his child. They came to him and said, "It is indecent for you to be mending that boat when this afternoon you buried your child." And the fisherman looked up and said, "Sir, it is very easy for you gentlemen to stay in the house with your handkerchief to your eyes in grief; but, sir, ought I to let the other five children starve because one of them is drowned? No, sir. We maun work, we maun work, though our hearts beat like this hammer."

The Significance of the Palm. But my text takes a step further, and it says, Go into the mountain and fetch olive branches and pine branches and palm branches. Now, the palm tree was very much honored by the ancients. It had 360 different uses. The fruit was conserved, the sap was a beverage, the stems were ground up for food for camels. The base of the leaves was turned into hats and mats and baskets, and from the root to the top of the highest leaf there was usefulness. The tree grew 85 feet in height sometimes, and it spread leaves four and five feet long. It meant usefulness, and it meant victory—usefulness because it was brought into celebration of triumph. And oh, how much we want the palm branches in the churches of Jesus Christ at this time! A great many Christians do not amount to anything. You have to shove them off the track to let the Lord's chariots come along. I know the old plan was, the plan now is, in regard to worldly investments—you hear it, merchants tell you—do not put everything into one thing, do not put all your eggs into one basket. But I have to tell you in this matter of religion you had better give your all to God and then get in yourself. Oh, says some one, "My business is to sell silks and cloths." Well, then, my brother, sell silks and cloths to the glory of God. And some one says, "My business is to raise corn and carrots." Then, my brother, raise corn and carrots to the glory of God. And some one says, "My business is to manufacture horseshoe nails." Then manufacture horseshoe nails to the glory of God. There is nothing for you to do that you ought to do but for the glory of God.

The Victory Over Satan. But the palm branch also meant victory. You all know that. In all ages, in all lands, the palm branch means victory. Well, now, we are by nature the servants of Satan. He stole us, he has his eye on us, he wants to keep us. But word comes from our Father that if we will try to break loose from this doing of wrong our Father will help us, and some day we rouse up, and we look the black tyrant in the face, and we fly at him, and we wrestle him down, and we put our heel on his neck, and we grind him in the dust, and we say, "Victory, victory, through our Lord Jesus Christ!" Oh, what a grand thing it is to have sin under foot and a wasted life behind our backs. "Blessed is he whose transgression is forgiven and whose sin is covered."

Some one says "How about the future?" What, says the man, I feel so sick and worn out with the ailments of life. You are going to be more than conqueror. But, says the man, I am so tempted, I am so pursued in life. You are going to be more than conqueror. I, who have so many ailments and heartaches, going to be more than conqueror? Yes, unless you are so self conceited that you want to manage all the affairs of your life yourself instead of letting God manage them. Do you want to drive and have God take a back seat? "Oh no," you say, "I want God to be my leader." Well, then, you will be more than conqueror. Your last sickness will come, and the physicians in the next room will be talking about what they will do for you. What difference will it make what they do for you? You are going to be well, everlastingly well. And when the spirit has fled the body, your friends will be talking as to where they shall bury you. What difference does it make to you where they bury you? The angel of the resurrection can pick you out of the dust anywhere, and all the ceremonies of the earth are in God's care. Oh, you are going to be more than conqueror.

Finishing the Arbor. My text brings us one step further. It says, "Go forth into the mount and fetch olive branches and pine branches and myrtle branches and palm branches and branches of thick trees." Now, you know very well—I make this remark under the head of branches of thick trees—that a booth or arbor made of slight branches would not stand. The first blast of the tempest would prostrate it. So then the booth or

arbor must have four stout poles to hold up the arbor or booth, and hence for the building of the arbor for this world we must have stout branches of thick trees. And so it is in the gospel arbor. Blessed be God that we have a brawny Christianity, not one easily upset. The storms of life will come upon us, and we want strong doctrine; not only love, but justice; not only invitation, but warning. It is a mighty gospel; it is an omnipotent gospel. These are the stout branches of thick trees.

I remember what Mr. Finney said in a schoolhouse. The village was so bad it was called Sodom, and it was said to have only one good man in all the village, and he was called Lot, and Mr. Finney was preaching in the school house, and he described the destruction of Sodom, how the city was going to be destroyed unless they repented and that there would be rain from heaven of sorrow and destruction unless they, too, repented. And the people in the school house sat and ground their teeth in anger and clinched their fists in anger, but before he got through with his sermon they got down on their knees and cried for mercy while mercy could be found. Oh, it is a mighty gospel; not only an invitation, but a warning, an omnipotent truth, stout branches of thick trees.

Well, my friends, you see I have omitted one or two points not because I forgot to present them, but because I have not time to present them. I have shown you here in the olive branch of peace, here in the pine branch of evergreen gospel consolation, here the palm tree branch of usefulness and of victory, and here are the stout branches of thick trees. The gospel arbor is done. The air is aromatic of heaven. The leaves rustle with the gladness of God. Come into the arbor. Come into the booth. I went out at different times with a fowler to the mountains to catch pigeons, and we made our booth, and we sat in that booth and watched for the pigeons to come. And we found flocks in the sky, and after awhile they dropped into the net, and we were successful. So I come now to the door of this gospel booth. I look out. I see flocks of souls flying hither and flying thither. Oh, that they might come like clouds and as doves to the window. Come into the booth. Come into the booth.

NOTED WOMAN SUFFRAGIST.

Gen. Cassius M. Clay's Daughter Has Done Much for Her Sex in Kentucky.

Within the past twelve years Miss Laura Clay, woman suffragist and daughter of the famous old Whitehall general, Cassius M. Clay, has revolutionized the position of women in Kentucky. She is the president and founder of the Equal Rights Association of Kentucky and under her leadership wonders have been accomplished. She is a mild-mannered, blue-eyed, round-faced little woman of pleasing address, but in pertinacity and vigorous intellect she is her noted father's daughter. From girlhood she has been a staunch advocate of the idea that commercial, legally, professionally and politically, woman is and should be recognized as the equal of man. In 1858 she began the serious battle for this idea. She was chosen president of the State Equal Rights Association in that year and appeared in Frankfort with certain bills which the association wished to have passed. At first politicians laughed the matter away, but ere long they found occasion to review their opinion of the equal rights propaganda. They passed some of the bills and thought that ended the matter, but the next session found the women lobbying as actively as ever. Bills were passed going a step further, and now the committee from the Equal Rights Association is one of the fixtures at Frankfort.

SAW THE POINT.

Director of a Railroad the Victim of an Employer's Sarcasm.

A railway director, who can take a joke as well as he can give one, is the good-natured subject of the following story: One of the employes of the road made application to him for a pass, in order that he might go home to visit his family. "You are in our employ?" asked the director. "Yes, sir." "And you receive your pay regularly?" "I do." "Well, let us suppose that you were working for a farmer. Would you expect your employer to take out his horses every Saturday night and drive you home?" "No, sir," answered the man, without a moment's hesitation. "I should hardly expect him to do that; but if the farmer had his horses out and was going my way, I should think he was a pretty mean man if he refused to give me a lift."

A Twinish Family.

Mrs. James Little, who lives near Atchison, Kan., who was herself a twin and the son of a twin, has given birth to her second pair of twins, the first pair being about 18 months old when the second pair made its appearance.

The acme of perfection would soon be reached if people would only follow the advice they give to others. White girls in the South find great difficulty in obtaining places of domestic service. While it is admitted that the vocation is highly honorable, it is claimed that the colored servants are better trained and more competent.

FARM AND GARDEN.

MATTERS OF INTEREST TO AGRICULTURISTS.

Some Up-to-Date Hints About Cultivation of the Soil and Yields Thereof—Horticulture, Viticulture and Floriculture.

Soil Analysis as a Guide.

The Ohio Experiment station receives many such requests as the following: "Will you make a chemical analysis of my soil to determine whether I need nitrogen, potash or phosphoric acid, and, if so, what will be the charge?"

To this request we make the uniform answer that such an analysis would be very expensive, and when made would usually have very little value as a guide to the use of fertilizers for the reason that the chemist has as yet discovered no reagent which possesses the same capacity for extracting plant food from the soil as that of the living tissues of the plant. To illustrate: Potash is a characteristic constituent of granite rocks, and a soil formed from such rocks may appear rich in potash under the chemist's analysis, and yet if that potash be still in the form of granule sand it will be yielded up very slowly to the feeble solvents of the plant.

Again: In some of the southern states are immense beds of rocks containing large percentages of phosphoric acid; but if these rocks are merely ground and mixed with the soil their phosphoric acid, which has resisted the solvent action of soil water for ages, will continue insoluble, and hence the necessity for treating these ground rocks with sulphuric acid, in order to make their phosphoric acid available. Still further: When a piece of marshy land has been drained it is often found that the crops planted upon it fail to thrive, although it seems to be very rich in nitrogen. The remedy here is to add barayard manure, something which savors strongly of carrying coals to Newcastle; but the explanation is that the semi-aquatic vegetation which formerly occupied the land decays so slowly that cultivated crops cannot get nitrogen rapidly enough for their needs. When the manure is added, however, it sets up a fermentation, which converts the nitrogen bearing materials into a more soluble and hence available form.

For these reasons the only practical way of learning the needs of a particular soil is to make experiments on that soil, after the general plan of those described in the bulletins of the Experiment station on the maintenance of fertility, and thus learn which combination of fertilizing materials will produce the greatest effect. —Chas. E. Thorne, director Ohio Experiment Station.

Irrigation in Siberia.

From Farmers' Review: The agricultural possibilities of Siberia are vast and but indifferently understood. The banishment of Russian political prisoners to severe and rigorous stations has created the impression that all Siberia is frigid and incapable of agricultural development. There are in the czar's Asiatic dominion millions of acres of fertile lands splendidly adapted to the growth of grains, and large areas are even now being farmed. Siberia, however, is a vast country and in many sections which have shown some agricultural development the winters are long and cold while the summers on the other hand are very warm and dry. Many of the small streams which are used for irrigation dry up during this season, the ground bakes and agriculture suffers much. To remedy this evil the farmers of certain districts construct each year storage reservoirs, and in the summers use the contents, reservoir and all, for the support of their crops. They do it in this manner: During the winter they collect great drifts of snow in the bottoms of deep, shaded valleys, rolling it down the sides in immense snow balls and there pressing and compacting it so that it will be more resistant to thawing. At the end of the winter they cover the enormous piles thus formed with branches, straw or trash, in order to protect the snow against the sun's heat. All during the spring this mass of snow melts a little during the days, but freezes at night until it becomes a great solid cake of ice. Then, when the temperature rises to summer heat and the streams begin to dry up from lack of rain, this snow-ice commences to melt away, and by means of a ditch leading from it, the water which runs down supplies the river until the recurrence of rainfall.—Guy E. Mitchell.

Fall Seeding of Alfalfa.

In some sections this summer tame grass pastures were eaten to the roots and then the cattle were turned on the meadows and these were grazed as closely as the pastures. Where this is the case, it is probable that with usual conditions during the coming fall and winter a large part of these pastures and meadows will next spring be either dead or so badly killed that they will have to be plowed up. This means a severe shortage next year in hay, and farmers should prepare to meet this shortage now. It can be met by sowing alfalfa between August 15 and September 15. Alfalfa sowed at this time under favorable conditions will furnish a good cutting of hay next May, and with ordinary conditions will yield three to four cuttings of hay next summer.

The ground for alfalfa should be well settled before seeding and only the surface made loose. Alfalfa will usually fall if seeded in the fall on freshly plowed ground. Well cultivated corn fields, with the stalks cut and drawn

off, give ideal conditions. Such fields should not be plowed but harrowed only before seeding. Wheat, oats, corn and millet stubble ground plowed shallow, harrowed thoroughly and allowed to settle before seeding, furnish good conditions for alfalfa. If such ground is mellow, plowing may not be necessary, as the land will only need to be disced and cross-disced.

The best time to sow is in the last half of August. It is safe to sow as late as September 15 if conditions are good. The ground must be well settled, with a loose mulch on top and well saturated with moisture so as to bring up the seed quickly and force the fall growth. If either of these conditions are lacking it will not pay to sow.

The best way to sow is with a press drill, using 20 pounds of seed per acre. Mix the seed with equal parts, by measure, of coarse, cornchop or bran. Drill half the seed one way and cross-drill the other half. If necessary to sow broadcast, use 25 to 30 pounds of seed per acre, cover with a harrow and roll unless there is danger from blowing. It is much better to seed with a drill. Alfalfa should be sown alone.

The best quality of seed will give the best stand and the most vigorous growth and is always the most profitable to use, although it costs the most.

Alfalfa will grow on any well-drained soil that will produce corn. It does best on well-drained bottom lands that do not overflow, but in the eastern half of Kansas, when properly handled, is a profitable crop on upland. Alfalfa seeded last fall on upland in Shawnee and Riley counties gave two good cuttings this summer before July 5, while tame meadows and prairie grass on adjoining lands yielded only half a ton of hay per acre.—H. M. Cottrell, Agricultural Kansas Experiment Station.

The Pickle Worm.

In the accompanying illustration is shown a pickle worm, natural size. These worms vary much in appearance, some being of a yellow-ash-white and very much resembling the inside of an unripe melon, while others are tinged more or less with green. They are quite soft and translucent, and there is a transverse row of eight



slight, slightly elevated spots on each of the segments.

The worms appear about the middle of July and continue their destructive work till the 1st of October. They attack the little cucumbers just when they are of right size for pickles, bore round holes in them and feed on the tender fruit. They are great feeders, and as many as three or four will sometimes be found in a single cucumber. They develop rapidly and reach full growth in three to four weeks.

When about to transform, they forsake the fruit in which they had burrowed, and drawing together portions of some leaf that lies on or near the ground, spin a light cocoon of white silk. In this cocoon, if it is not too late in the season, they change to moths like the one here shown, emerging in about ten days. The late ones pass the winters in the cocoons. The moth is very strikingly marked. It is of a yellowish brown color, with an iris-purple reflection.

Mary Treat, in her book on "Injurious Insects," says of it: The pickle



worm is indigenous and has, doubtless, existed in some part or other of the country from time immemorial. The French entomologist, Guenee, gives as its food-plant a species of potato, and it is just possible it may not always have fed upon the same plants upon which it was first found in this country. The best remedy is hand picking, feeding the infested fruit to stock.

B. S. Hoxie of Wisconsin, in a note to the Farmers' Review, finds fault with a recent article on forest preservation. The sentence that most arouses his resentment is: "Careful estimates on the growth of the spruce show that the trees now having a diameter of 13 inches cannot be replaced by trees of the same size in less than 150 years." In commenting on this Mr. Hoxie says: "While it is true that the spruce, as well as nearly all the other coniferous trees, make slow growth during the first four or five years from seedlings, they are not slow-growing trees, as anyone can satisfy himself by counting the grains or rings in almost any packing case of second-growth timber, if he has not a section of the tree. I have visited several groves of spruce and pine—white and Norway—of from 20 to 30 years' planting from the nursery, and find these trees from 8 to 14 inches in diameter, and from 20 to 40 feet tall. I have a cross section of a spruce that measured 13 inches in diameter one foot from the ground, and I count 24 rings. When cut down the tree was 42 feet long. This tree grew on a neighbor's lawn, and I knew the date of its transplanting from the nursery."

W. J. Stillman, who died recently in England, was a man of varied talents—an artist, art critic, author, journalist, diplomatist and archaeologist. He was an intimate of Ruskin, Millais, Hunt and other members of the Pre-Raphaelite group.

From the 1899 report of the Jersey Experiment Station on the following: The irrigation practice in the Jersey Experiment Station has been based thus far on a small scale. Plants capable of irrigating 10 to 20 acres are the rule. They have, however, clearly demonstrated two points—first, an irrigation plant is a desirable adjunct to a farm; and second, that it pays. In most cases the water has been applied by pumping, either from a stream or from wells. The cost of these small plants is relatively large per acre, yet in all cases they have proved profitable, because the water has been used for such crops as are liable to suffer seriously in case of short drouths. Of the eight small plants of which full data have been obtained, the initial cost per acre for them ranges from \$35 to \$100, and, with the exception of one case, the water is applied by pumping; in four cases it is obtained from streams, and in the others from wells, and the returns thus far have in all cases paid a large rate of interest on the investment.

The question of small plants and their erection and equipment has been well worked out, and one capable of furnishing water for from 6 to 8 acres can be erected and equipped for from \$400 to \$600, depending on the location of the land in reference to situation of the water—that is, whether the point to which the water is to be raised be high or low. This does seem a relatively high initial cost as compared with that of canals and ditches or even of storage, but as used in intensive practice and for crops of a high commercial value these plants do return a large profit on the investment. The information thus far gathered indicates that irrigation is desirable in the humid districts, and that small plants, while relatively expensive, are profitable and result in greatly reducing the effects of a deficiency in rainfall.

Care of Trees from the Nursery. Whether purchased direct from the growers, or ordered through agents, care should be taken that the roots of the trees are not exposed to the action of the sun and dry winds. The practice of many farmers of placing the bundles in their wagons and driving home without taking any pains to cover them to prevent the drying of the roots has undoubtedly caused the loss of thousands of nursery trees. Wet straw and blankets should always be provided when notice has been received that the agent from whom the trees have been ordered is to make a delivery, and, as soon as possible, the trees should be either planted or heeled in. When received in the fall, unless one has a cellar, where the temperature can be kept just above the freezing point, in which they may be placed with their roots in the soil, it will be desirable to heel in the trees in some well-drained spot, where there will be no danger from standing water. A trench should be dug a foot or so in depth and about three feet wide, in which the trees should be piled with the tops inclined toward the south at an angle of about twenty-five or thirty degrees from the horizontal. The bundles should be opened and the soil thoroughly worked among the roots and pressed about them. It is always advisable to have the trunk and greater part of the branches covered, especially in the case of peach and other tender fruits, and whenever fruits have not been thoroughly ripened. Care should be taken to have no straw or rubbish about the trees, but it is a good plan to use evergreen boughs to break the sun's rays and prevent the alternate freezing and thawing, as well as the rapid thawing of the trees after a severe cold spell. A trench should always be dug to carry off any surface water about the trees.—Michigan Bulletin.

The Hawaii Experiment Station.

A United States Experiment Station is in process of being established on the island of Oahu, one of the Hawaiian group. The piece of land to be used begins in the suburbs of Honolulu, and is at that end only 100 feet above the sea. It rises gradually for a distance of two miles, and is at that distance 1,400 feet above sea level. The lower slope is densely covered with thickets of native growth, but the upper third is covered with a planted forest of Australian Eucalyptus, Acacia and Grevilla species. The buildings are now being erected. One of the important lines to be taken up is that of the production of hay-making grasses. All hay is now imported and retails at \$27 per ton in Honolulu. Another line to be followed will be an attempt to ensile the tops of the sugar cane. At the present time all of this material is dried and burned. The cultivation of citrus fruits will also begin, in an attempt to give the natives some product they can export at a profit. Poultry culture will also be investigated and stimulated. At present there is a troublesome disease among fowls that makes it difficult to raise chickens. As a consequence few west and eggs are very high.

Fruit Raisers.

Peaches in many parts of Ohio are about half their usual size and unsatisfactory. Pears are reported a large crop in Jefferson and Harrison counties, Ohio. The prospects for peaches and grapes in New York state continue favorable but pears will be scarce. Illinois fruit prospects are poor. All kinds of tree fruits are scarce in New Jersey except peaches. Apples are so numerous in Gloucester county that some fields of cistaceae have been entirely destroyed. California reports state that Southern fruits are of good quality but the yield is below the average. Good rains have caused improvement in late peaches and apples in western Kansas.