

## NOTES AND COMMENTS

The Czar of Russia has also appointed a commission to supervise and encourage the manufacture of war supplies. It is said to have been given practically despotic power over the whole range of Russian industry. Its business is to see that munitions are made, no matter what else remains unmade. Coming on the heels of the passage of the British act to compel the manufacture of munitions as fast as possible and on what France and the Teutonic allies have already done in the same direction, the creation of the Russian commission gives new emphasis to the chief end and aim of man, as it seems to be regarded just now by the European belligerents.

That end and aim is to make war supplies. For this man may not be exactly come into the world, but for this, in Europe away from the actual battle area, he exists to-day. "Produce, produce!" is still the cry, but it is conditioned by the warning to produce munitions first of all. Of course, some men must be exempt from this duty. They are the men charged with the task of disposing of the munitions in the most effective way. But for the rest, the primal, fundamental duty to the state is to make them in ever-increasing quantities.

Once the chief end of man was assumed to be the pursuit of the true, the beautiful, the good and the harmonious development of his powers in accord with these ideals. But the activities of the European governments just at this stage force us to discard the theory. The chief end and aim of man, if we are to judge by the thing on which the greatest stress is now laid, is to be fruitful of munitions and thus to deplete the earth.

"All the men who remained down deserved twenty Victoria Crosses. They were real heroes a thousand times over." Here is a genuine tribute from a brave man, Captain William Finch of the Arabic, to the other brave men who have gone before. The world may well pause with Captain Finch, regardless of the minute of the weighty international matters tied up in the fate of the ship, to honor the engineers who yielded up their lives that others might live.

There is a mighty force in the tradition of the sea. Praise and great praise, belongs to the leaders such as the captains of the Titanic, the Lusitania and the Arabic, the seamen who stand on the bridge until the ship sinks beneath their feet. But what of the humbler men, the unknown, who, deep in the heart of the great vessels, ignorant of what is portending, shut off from sea and sky, continue at their service? Without glamor, without cheers, grimly facing hard mechanical tasks, they strive on until the last moment. They might seek the coward's safety. With impunity often, without criticism they might climb out of the dark hole for a man's conflict with the waters. But like caged animals they choose to die. The men below are heroes a thousand times over. They are the backbone of the world.

### MUNITION WORKERS.

Efficiency of Volunteers Has Been Greatly Improved.

The stockbrokers and their clerks of the London Stock Exchange are proving their worth in voluntary enlistment as munition workers. At the outset the results of the voluntary efforts were, of course, comparatively poor as compared with the output of the regular workers. Gradually, however, there has been a "speeding-up," which has brought an average Sunday's work of the Stock Exchange munition volunteers to the remarkable distance of that which is customary during a day in normal times on the part of the regular employees.

As, however, the amateur operators have increased their efficiency, so have the week-day workers added to their production, so much so that the output per professional munition worker is now at least 70 per cent. higher than it was at the commencement of the war, and there does not appear to be much further room for improvement, as many of the machines are being operated to their utmost capacity.

It is very noteworthy, however, that the Stock Exchange workers and other volunteers, whose hands suffer severely from manual labor, have been able, within a short time from their enlistment in the rank of munition producers, to manipulate their machines with an efficiency which in normal times would compare very fairly with those of skilled operators.

### Gave Him Indigestion.

"I hear that your cook has left owing to poor health?"  
"Yes, mine."

### High Cost of Killing.

Bombardments are expensive. Nations that throw shells have to shell out.

The Meek One—My wife says I'm a "worm." The Friend—Why don't you retaliate? The Meek One—Why, if I "turned" she'd be sure of it.

Susie (aged six)—"And when we grow up we'll be married, won't we, Tommy?" Tommy (sadly)—"No, Susie! I cannot marry into your family. Your papa has weak eyes and your auntie has spasms."

## THE BY-PRODUCT THAT SAVES DOLLARS

Don't Let the Apples Go to Waste—They May Be Manufactured at Home—How Vinegar of Prime Quality is Made

By G. J. Culham, B.S.A.

A drive through the rural districts of Ontario, in the early or late fall leaves several impressions. Of these, one of the outstanding, is the more or less large amount of apples going to waste. Many orchards remain unpicked, and those having been picked show still plenty of apples left. Why should this state of affairs exist; is there no possible use for these culls and windfalls other than feed and manure? Cider and cider-vinegar making should to some extent help solve the problem and at the same time return a fair rate of interest on any capital invested.

The manufacture of cider vinegar on the farm is not uncommon, yet it is not as prevalent a practice as it should be. Wherever apples are grown there is an opportunity of producing a good quality of cider vinegar, and such vinegar can readily find a market. Cider vinegar is second only to wine vinegar in flavor and will therefore be used in the household in preference to the more expensive wine vinegar or less tasty chemically prepared wood vinegar.

### How to Manufacture Vinegar on the Farm.

Only ripe apples should be used. Most of the common varieties available will do when ripe, but they do not contain enough sugar when green. The apples must be clean, not decayed or overripe. Dirty apples are apt to carry bacteria of an undesirable nature into the juice which would cause various bad flavors in the vinegar.

The juice is removed from the fruit by grinding and pressing. If the manufacture of vinegar is to be made on a more or less large scale a cider press will be necessary; if on a small scale a hand press may be used. The large presses are expensive to install and operate and need a special building and power outfit. The hand presses are of very small capacity and only small quantities of vinegar could be made with them. If there is

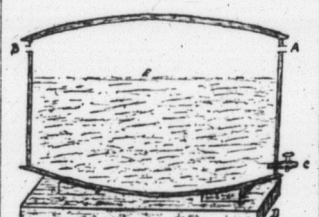


Fig. 1.—A and B, openings protected by cheese cloth. C, spigot. D, stand. E, surface of liquid.

a cider mill in the vicinity it would be better to make use of it. The cost of grinding and pressing the apples is low compared to the installation of private presses. The presses and other utensils, which are apt to get dirty, should always be kept very clean, for here again harmful bacteria and yeasts may enter the juice and spoil the vinegar.

In the manufacture of cider vinegar two important fermentations play a part: alcoholic, where the fresh apple juice is fermented by yeasts and acetic fermentation, which turns the alcohol into vinegar and is caused by bacteria of a certain kind which make up the "Mother." 4/5% of acid is produced. Both processes are necessary for vinegar making; they must be kept distinct or poor results will follow. The steps are here outlined which keep these two fermentations distinct.

### Be Sure the Barrels are Clean.

The barrels to be used should be new or cleaned in such a way that all traces of the previous contents are removed. Should any be left it will spoil the flavor of the vinegar, also it may stop the fermentations altogether and the whole process will then be a failure. Thorough washing with scalding water should be given even when the barrels have been recently used for cider or vinegar. The forty-gallon barrel is the most serviceable size.

Before putting the apple juice into the barrel it is well to let it stand for two or three days in an open end barrel to let some of the solids settle out. Then the juice is drawn off carefully, so that the settlings will be undisturbed, and put into a closed barrel, as shown in figure 1. At all times it is well to try to get rid of any settlings, as by so doing, a clearer, brighter and therefore more attractive vinegar is made. Metal wares should be carefully avoided throughout all operations.

### Alcoholic Fermentation.

When the barrel is about half filled it should be put in a cellar or room where the temperature runs between 45 and 60 deg. F. This is the best temperature for the yeast to grow and to produce a maximum amount of alcohol. The apple juice usually contains the right kind of yeasts, but to make certain and to make the fermentation more rapid, it is well to add yeast. The best yeast to add is bakers' yeast, one small cake to 5 to 10 gallons of juice. Any of the yeasts used in the home for bread making will do. The cake should be dissolved in a few pints of water and then thoroughly mixed with the juice. By add-

ing the yeasts, alcoholic fermentation will be complete in about three months, if the temperature is right. If the temperature is a little too low, if no yeasts have been added, it will be probably twice that long.

### Acetic or Vinegar Fermentation.

When alcoholic fermentation is completed it is well to again draw off the top liquid and avoid settlings. The barrel should be well washed out and the clear liquid replaced. Though it is not absolutely necessary it is better to then add 2 to 4 quarts of old vinegar which contains the "Mother of Vinegar." The barrel must be on its side and not more than two-thirds full; this gives a large surface exposed to the air. The more the air admitted in this way the more thorough will the fermentation be. The temperature at which the barrels are kept will make a big difference in the time to complete the fermentation. At 50 to 70 deg. F. it will require from 18 to 24 months; in a warmer place, 12 to 18

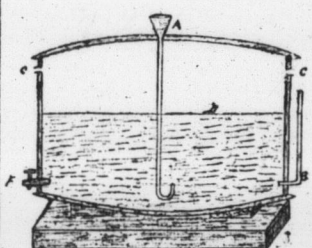


Fig. 2.—A, funnel and glass tubing by which juice enters under the "mother." B, glass tube to show height of liquid in barrel. C, opening protected by cheese cloth. D, "mother" on surface of liquid. E, stand. F, spigot.

months. If a good mother has been added and the temperature is high it will be complete in from 6 to 12 months.

In the method just described only the barrel is needed, but the process is slow and only small quantities can be made. To make larger quantities a large number of barrels would be required and therefore much more room. To avoid this there is another method, which, if followed, will give the best quality of vinegar in the minimum amount of time.

Figure 2 shows the barrel used. An ordinary barrel is fitted out cheaply with the necessary funnel and tubing. The barrel is half filled with the fermented-juice and the mother added. At the end of three to four weeks, in a warm room, one-fourth of the liquid may be drawn off by the lower bung. The barrel must not be disturbed. The amount drawn off is replaced by the same amount of new liquid and is run in by the top funnel and tube, so that it is delivered underneath the mother. If on top it will spoil the mother and the fermentation.

This method makes a fine quality of vinegar and is of very little extra expense other than the greater attention demanded. The increased amount made in a given time offsets the added expense and labor.

### The Care of Cider Vinegar.

After the vinegar fermentation is complete a certain amount of care is needed, otherwise the fermentation will go further and the vinegar will be lost. Care must be taken, as at all times, to keep the vinegar free from dirt, flies and anything which would carry bacteria into it. It has been shown before that for the vinegar fermentation to proceed, a large amount of air is necessary; hence to stop it the first means is to exclude the air. When the vinegar is drawn from the barrel it can be bottled, bar-

reled, or put in small kegs to suit the market. Whatever the container, it should be filled as full as possible and all bungs closed tightly.

### Summary.

Use only clean, sound apples. Use all cleanliness in obtaining the juice. Have clean and well scalded barrels, fill about one-half to three-quarters full of juice. Cover bungs with cheese cloth to prevent entrance of flies and dirt. Keep barrels at from 55 to 70 deg. F. if rapid fermentation is desired; yeast added shortens period of fermentation. For vinegar fermentation add some old vinegar with mother and keep at a temperature of from 55 to 75 deg. F. Fill the containers as full as possible with the vinegar and cork tightly.—Canadian Countryman.

### TELL YOUR FORTUNE?

Much Depends Upon the Interpreter of Teacup Signs.

Can you tell fortunes in teacups? Perhaps you are one of those who, while laughing to scorn the mysteries therein, are always eager to know what Fate holds for you.

Anyhow, you will find a wonderful amount of fun and not a little prophecy in following these rules for reading the contents of the teacup.

First of all, take the cup in your left hand and shake it carefully to mix up the dregs, then place it upside down in the saucer, and move it right round three times. Now forecast.

If a little string of tea leaves runs right around the cup, it means a journey. An anchor is a fine omen—it stands for hope and good luck. If it is near the top of the cup, it may mean a sea-voyage; and if that most popular symbol of all, a ring, be near it, a honeymoon may be mixed up with the voyage.

All women look for a ring in the teacup. It may be a tiny circle of tea leaves or grounds, it may be just tiny spikes forming a circle, or it may be a single curled leaf.

Should this ring come near the top of the cup, a marriage is very near; but if it is at the bottom, the wedding will not be so soon. Much merriment can be caused if the ring is discovered in the cup of a married person, by forecasting a second marriage—of course, in the far-away future.

Good luck is always predicted by the clover leaf and the horseshoe; flowers denote success; a cross foretells sorrow; an umbrella foretells a storm; fruit means health; while little yellow particles in the bottom of the cup are a sure indication of money.

Beware of an enemy if a snake lies in the bottom of the cup; but take comfort in a good friend if a horse or a dog is depicted near the snake. Deceit is about when a cat is shown.

Hasty tidings, probably a telegram, are foretold by a galloping horse, but they are not necessarily bad, and the luck is decidedly good if the horse has a rider.

Much depends upon the interpreter of teacup fortunes. A clever girl can create quite a little air of mystery round her fortune-telling, and make a lot of harmless fun and conjecture on a dull afternoon.

### PROFITS FROM ROTATION.

The crops are rotated on the twenty-three demonstration farms operated in North Dakota. This gives each crop the best chance to do well. In 1914, the average cost per acre of producing the crops was \$9.13, the average income per acre was \$17.49, leaving an average net return of \$8.36. The net profits per acre from each crop was: Corn, \$8.49; hard wheat, \$8.02; durum, \$18.33; oats, \$7.87; barley, \$2.07; peas and beans, \$7.83; clover, \$8.96; timothy and clover, \$17.36; potatoes, \$9.51; winter rye, \$10.80; alfalfa, \$20.95; and millet a loss of \$1.86. The first of these farms was started nine years ago. A five to six year rotation is practised on most of them.

"Tabby" cats are so called after a street in Bagdad.



THE KAISER—"AH, IF I COULD ONLY QUIT NOW!"

—From The New York Evening Sun.

## THE SUNDAY SCHOOL

INTERNATIONAL LESSON.  
SEPTEMBER 19.

Lesson XII.—Defeat Through Drunkenness (Temperance Lesson),  
1 Kings 20. 1-21. G. T.  
Hos. 4. 11.

1. The Young Men of the Princes (Verses 10-15).

Verses 10. The dust of Samaria—Ben-hadad boastfully declared that he would bring so great an army into Samaria that if each man thereof took up but a handful of dust, the whole of Samaria would be carried away.

11. Let not him that girdeth on his armor—Ahab answers with a proverb according to the Oriental propensity. The king who has won a victory, and hence has taken off his armor, has the right to boast; not he who has a victory to win, and hence is just putting on his armor.

12. He was drinking—Ben-hadad was so full of confidence that he was giving a banquet to his allies, the neighboring kings (see verse 1), in honor of the victory he felt sure he would win.

13. In the pavilions—Similar to "booths" (Gen. 33. 17; Lev. 23. 42; Jonah 4. 5, etc.) or "tabernacles" (Lev. 23. 34). These "booths" were temporary structures erected of branches of trees, as at the Feast of Tabernacles.

Set—in the Hebrew the sentence stops with this word. The words themselves in array are added. The margin reads, "Place the engines." As this same word set, used in Ezek. 4. 2, is followed by the noun "battering-rams," it is supposed that the command given by Ben-hadad to the soldiers was to set or place the battering rams over against the gates of the city. The Septuagint version reads: "Build a stockade, and they set a stockade against the city."

14. A prophet came—When Elijah spoke that he alone of all the prophets was left, he did not mean that all the prophets except himself had been killed. He meant that through fear of death they had stopped prophesying. Many an unknown prophet there was who, like Eldad or Medad, came to prominence at the opportune moment.

15. The young men of the princes of the provinces—The picked young men of the princes, who would be marked as valorous and discreet. Who shall begin the battle?—That is, Who shall strike first? Ahab might have remained in the fortified city and for a long time ward off the besiegers. To rush out into the open, however, and engage the unsuspecting attackers, was more promising of success.

II. The Drunken Ben-hadad (Verses 16-21).

16. And they went out at noon—Men engaged in drunken revelry are in no condition to meet the foe. (Compare Dan. 5. 1-4).

17. Ben-hadad sent out—Even in his drunken stupor he is aware that something unusual has happened.

18. Take them alive—Whether they have come for peace or for war they were to be captured. The more he was dispossessed of his mind the less he was in control of his words.

19. The army which followed them—That is, the two hundred and thirty-two young men who went out to begin the battle were followed by the seven thousand soldiers, who came upon the scene to increase the confusion of the unexpected attack.

20. They slew every one his man—it was comparatively easy for these sober young men to acquire themselves well in the fight.

The Syrians fled—A vast army fleeing before a comparatively few pursuers.

### HOW THEY DID IT.

California raisin growers, through wide advertising, brought about the observance of "Raisin Day." Through this they have been able to double their output in ten years.

Since Saskatchewan has "gone dry" a movement has been started to turn one of the biggest breweries into a cannery for putting up vegetables. In that city there are some 2,000 more vegetable gardens under cultivation as the result of a movement for better home surroundings.

Many experts agree that the greatest agricultural and industrial boom in our economic history is just beginning. This is no time for pessimism; let us each do our work.

The great Pan-American Road Congress will convene at Oakland, California, on Sept. 18. Its mission will be the betterment of roads in America, and W. A. McLean, Chief Engineer of the Ontario Highway Commission, will preside at one of the sessions. Any new idea—or an old one—put into practice upon Mr. McLean's return will be welcomed.

Bankers announce that they have ample funds on hand to take care of the harvesting, moving and marketing of the Canadian wheat crops.

G. E. White, of Lacombe, Alta., has a Holstein cow that has given 18,258.70 lbs. of milk in her year. Her butter record is 625 lbs. The cow is registered as Butter Argie Cornucopia Palestine.

Mr. William de Morgan published his first novel when he was sixty-six years of age.

## About the Household

### Dainty Dishes.

Corn Oysters.—Score down centre of each row of grains on cob and press out pulp with dull knife. To pulp of dozen ears add level teaspoon salt, one saltspoon pepper and three well-beaten eggs. Drop in tablespoonfuls on hot greased griddle, in oyster shape. Brown on one side, then on other, and serve immediately on hot dish. Tomato sauce goes well with corn oysters.

Peach Petty.—Skin, stone and slice ripe peaches. Pick stale bread into tiny shreds, then pack alternate layers of bread and peaches in pudding dish, sprinkling sugar over fruit and dotting bread crumbs sparingly with butter. Bottom layer should be peaches, top layer bread. Over top pour a little melted butter and sprinkle with sugar. Bake until fruit is tender and top nicely browned.

Stuffed Sweet Peppers.—Remove seeds from six sweet peppers and cook peppers in boiling water until tender. Make forcement of one cup tomato pulp from which juice has been drained; one-half cup bread crumbs, one teaspoon minced onion, a few of the pepper seeds, all well mixed together and thoroughly seasoned with salt and pepper. Stuff peppers and lay in baking dish. Pour one tablespoon cream over each pepper, lay generous slice butter on each and bake in moderate oven twenty minutes.

Boiled Tongue.—Wash and clean tongue and cover with boiling water. Add one-fourth cup each of chopped carrot, turnip and onion, four cloves, two pepper-corns, bouquet of sweet herbs and salt to taste. Simmer until tongue is tender. Cool in kettle, remove skin, place in dripping pan, brush with melted butter, cover with buttered crumbs and bake twenty minutes, basting often with chicken stock or hot water.

Sauce Piquante.—Three tablespoons butter, four tablespoons flour, one and one-half cups stock, one-half teaspoon salt, one-fourth teaspoon pepper, two tablespoons vinegar, one tablespoon capers and one tablespoon each chopped chives, olives, pepper and pickle. Cook five last named in vinegar five minutes and add to brown sauce made of butter flour and stock. Simmer twenty minutes and serve.

Sour Cream Pie.—One cup of thick sour cream, one-half cup sugar, one cup chopped raisins, two eggs, one and one-half tablespoons flour, two tablespoons powdered sugar, one teaspoon cinnamon, one teaspoon cloves, few grains nutmeg, a few grains salt and pastry. Mix raisins, sugar, flour, salt and spices together, add sour cream, mixed with egg yolk, slightly beaten. Line pie pan with pastry, pour in mixture and bake about twenty-five minutes in moderate oven. Make meringue of egg whites and powdered sugar, heap on pie and cook for ten minutes in slow oven.

Pea Timbales.—One cupful pea pulp (from fresh canned or dried peas), two eggs, two tablespoons thick cream, one tablespoonful butter, two-thirds teaspoonful salt, one-eighth teaspoonful black pepper, a few grains of cayenne, and add onion juice. Beat the eggs, mix with pea pulp, add butter, melted, and other ingredients, and turn into buttered molds. Bake in pan of hot water until firm, and serve with one cupful white sauce, to which has been added one-third cupful cooked and drained

peas. A teaspoonful of finely chopped mint leaves may be added for seasoning if liked. Cubes or figures cut from tender cooked carrot in the sauce give a good color effect.

### Household Hints.

A pretty table with everything fresh upon it helps to give food a relish in oppressively hot weather.

When iodine is spilled on sheets or clothing, simply soak the article 24 hours in cold water.

Paint bedsprings with aluminum paint and you will have no trouble with rust on your sheets.

The best dressing for most vegetables is simple butter. White sauces are apt to ruin the flavor.

Buttermilk is a cheap and valuable food. If served with potatoes it is a cheap and wholesome dish.

Nuts are a cheap food, and may form the staple of an uncooked meal. If ground they are easy of digestion.

If you find yourself without shoe polish in the morning a little lemon juice applied will produce a brilliant polish.

Drying dishes with towels is not the best or most cleanly method. A well-scalded and drained plate is much cleaner than one that has been dried with the average towel.

If 30 per cent. more vegetables (varied in kind and well cooked) and 30 per cent. less meat are served up hardly anyone will notice the difference—except the housekeeper when she makes up her accounts.

To keep color of catsup put whole cloves and allspice into a new soap shaker; use as a spoon in stirring the catsup. In this way the flavor of the spices is gained without sacrificing the color of the catsup.

The best way to warm a joint of meat is to wrap it in tightly greased paper and keep it covered while in the oven. By having it covered thus the steam will prevent the meat from becoming hard and dry, and the joint will get hot through in less time.

The watermelon when ripe is considered excellent for liver, kidney or bladder affections. Among the peasants of Russia and Turkey, fresh watermelon juice is held in high esteem for intestinal catarrh or dropsical affections.

If you put a tablespoonful of powdered chalk in a cup and mix it to a cream with turpentine, then add a teaspoonful of liquid ammonia, and put it in a tin, it makes an excellent brass polish; it will also make the lids of your saucepans shine like silver.

The next time you have a hole in a stocking that you dread to tackle baste a square of net over the hole. Then darn in the usual way. Draw the threads back and forth through the meshes of the net, skipping every other one, so that in darning in the opposite direction there is a mesh to darn through.

Never put food away in the safe until it is quite cold, or it will probably turn off. Never let anything cool with the lid on. Never leave a metal spoon in any food; even a silver spoon is affected by salt. Never let anything remain all night in a saucepan—and especially not in enamel ware; many deaths have been caused by the neglect of this rule since food would often become poisoned by being allowed to stand in such cooking utensils. The only really safe receptacle for food to remain in is one of china, glass, or crockery.

## The Moral Order of Heaven

Righteousness Will Seek Peace and Pursue It, But Not at Any Price.

"Righteousness exalteth a nation."

—Prov. xiv. 34.

The righteousness on which the Bible is forever insisting and which it forever preaches on the attention of men as being both their supreme duty and glory is all inclusive. It is not a single virtue. It embraces all the virtues. The righteous man is truthful, honest, pure minded, temperate, just, generous, kind, merciful. A man may be honest and yet not temperate; he may tell the truth and yet be lacking in generosity. But a man cannot be a righteous man and be lacking in any of the specific virtues. Truthfulness alone, or generosity by itself, or temperance alone is not enough to exalt a nation or a man. Only righteousness can do that.

Not a Righteous Man. Again, this righteousness which the Bible commends so highly and insists on so vigorously is not a negative or passive thing. It is active, aggressive, enthusiastic, impassioned, absorbing. If a man's so-called righteousness does not compel him to hate and resist iniquity, to put his heel on the head of every hissing falsehood he is cognizant of, to overcome and thwart evil, to expose and punish injustice and cruelty, to take sides against oppression and wrong, that man is fooling himself. He may be amiable, peace loving, polite, but he is not a righteous man. He may feel sorry when he sees a big bully abuse a weak and defenceless man, but if he does not run to the help of the poor victim his righteousness is a sham. He may have some feeling of indignation as he witnesses brute power win out

against innocence, but if his feeling of indignation does not take form in active defence of the innocent his so-called righteousness is the sheerest hypocrisy.

Oh, but we are told by very high human authority that a man or a nation ought to be too proud to fight. If by that we are to understand that a man or a nation ought to be too proud to pick a quarrel, well and good. That is the moral order of heaven and earth.

### Must be the Order of Earth.

God would not be God without that and man would not be man without it. God would be lacking in dignity and in moral majesty without it and man would be mere paste without it. God's throne is established on the righteousness that opposes wrong, defends the weak, relieves the oppressed, delivers the slave, pulls down the power of the tyrant, and is the only true basis of national prosperity and power.

Oh, what irredeemable fools we are as a people and how slow and sordid of heart are we to think that vast wealth will exalt our nation, that abundance of corn on the tops of our mountains and of cotton in our valleys will make us great! And what a heritage of woe we are storing up for future Americans because in the day when tremendous issues are at stake and priceless interests are trembling in the balance our lust for gain will not permit us to drop in even a penny-weight that might tip the scales in favor of that righteousness which alone can exalt our nation and save the peoples of the world.—Rev. T. B. McLeod.