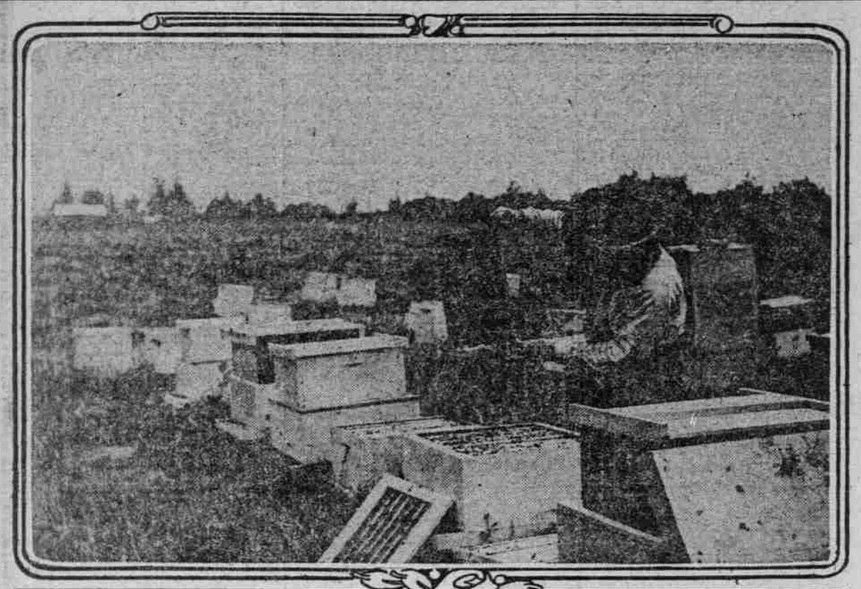
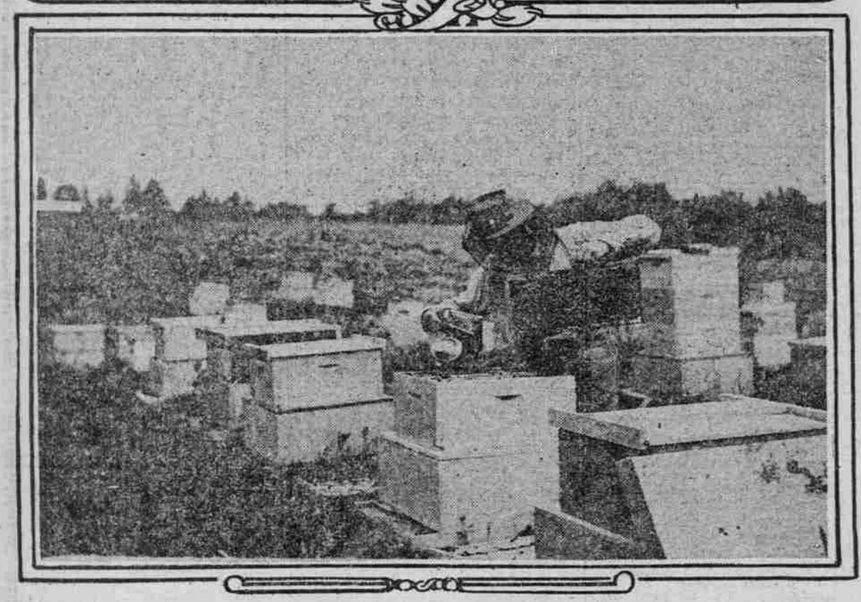
MODERN BEE HIVE PREVENTS HONEY WASTE WHICH RESULTS WHEN TREES ARE ROBBED

Early Pioneers of Oregon Smoked Out Swarms in Wooded Sections, Killed Many and Obtained Messy Combs—Method of Building Is Great Aid to Inventor in Fashioning Today's Shelter.





TOP—SHOWING A QUEEN EXCLUDER, FOR KEEPING THE QUEEN IN BROOD NEST. LOWER—THE SMOKER AND THE HIVE TOOL ARE ALWAYS IN EVIDENCE.

BY SHEBA CHILDS HARGREAVES.

BEES in the wild state build their combs in hollow trees, in caves in the hillsides or in sheltered crevices in the rocks. The size of the colony depends in a large measure upon the available space at their command.

Swarms absconding from an apiary build just as their remote ancestors did, unless they can be induced to enter a new hive. Hunting bee trees was a favorite pastime of the early pioneers of Oregon and in wooded sections of the country hollow trees filled with honey are still found occasionally.

In order to secure the honey it was customary to kill the bees by smoking. This honey was consequently rather messy, being taken from the tree in chunks more or less filled with dead bees, pieces of bark and dirt. In fact, the old-fashioned bee hives produced honey in bulk and the wasteful method of killing the bees when robbing them was commonly practiced.

Hive Wonderful Device.

The modern bee hive is a wonderful invention. The casual purchaser of a pound of honey in a dainty white box has probably wondered just how the bees could be induced to place the comb so evenly in the frame. The close observer has noticed that the wasp builds horizontal combs, but the bee builds vertical combs and the inventor has taken advantage of this fact in fashioning the bee hive.

The bee hive as we have it today is made in three separate parts—base, brood chamber or body, and top. This arrangement makes it possible to reach the interior of the hive at any time. The brood chamber is ingeniously fitted with eight or ten removable frames, depending upon the size of the hive.

These frames have projecting ends at the top which rest on cleats fastened to the brood chamber. By wiring sheets of foundation—specially prepared wax—to the frames the bees are induced to build perfectly straight vertical combs, which may be removed from the hive when necessary.

Cells Formed for Rearing.

The bees draw out the stamped wax and thus form cells for brood rearing in the center of the brood chamber, while the outer frames allow plenty of space for storying honey for the use of the colony. The bee keeper does not, as a rule, disturb the stores in the brood chamber, though it is sometimes used when preparing extracted honey.

The beginner should never under any circumstances disturb the stores in the brood chamber, for the grave problem with him is to keep his bees from starving. The so-called bee diseases of the amateur are often not diseases at all, but simple starvation due to lack of foresight on the part of the operator.

The base of the hive projects in the front to allow a landing stage at the entrance to the hive. The top of the hive slopes two ways so that it sheds water. As soon as a swarm enters a new hive they begin the work of fastening the parts together so as to exclude air and moisture. They manufacture for this purpose a gum, or varnish, called propolis. It is not definitely known how they secure this substance, but it is supposed to be collected from resinous buds of such trees as the pine and balm of gilead.

Super Used for Storing.

The frame in which the pound boxes are placed is called a super. It is a box without top or bottom, which fits in between the brood chamber and the top of the hive. When by indications, which should be known to the bee keeper, it is time to put the super in place, the top is pried off with a chisel or a specially prepared hive tool and the super is fitted over the body of the hive and the top replaced. The work of storing honey for the fortunate owner then begins in earnest.

The super is also cleverly contrived. The pound frames fit into place in such a way that they leave beeways, as the roads which the bees travel in bringing in the honey are called. Amateurs have been known to fit the frames into shape in such a way as to exclude the bees entirely from the super. Careful attention to the minute details is necessary in all bee operations; the careless slip-shod individual will never succeed with bees.

The honey sections, or boxes, in which the finished product is produced, are bought flat by the hundred or the thousand, and after soaking in water are bent into shape and fastened together. In order to insure straight combs each box is fitted with a piece of stamped beeswax.

Some beekeepers use about an inch of this foundation at the top of the section, but if full sheets are supplied the bees are saved the labor of making wax; they simply draw out the sheets of foundation into comb and are free to devote their entire time to honey-gathering. It is estimated that bees will make from 10 to 14 pounds of honey while they are making a pound of wax, so the advantage in full sheets of foundation both in brood chambers and boxes is perfectly apparent.

The work of preparing the new hives and the supers for use is not at all heavy, though it must be done with a nice precision. As a rule women do this work better than men, being deft of hand and more given to attention to detail. This part of the business should be attended to before the spring rush begins. Swarms are often lost through not having a hive in readiness; then, too, there is not a day to be lost when the honey flow commences, for at best it is all too short in this locality.

Hives may be secured flat and set up at home, though if women are to do the work it will be just as well to buy them set up ready for use. The hives should be painted before placing them in the apiary. The color would of course be determined by the taste of the owner, though no one could go far wrong in painting them all white.

Escape Prevents Stinging.

A bee escape is a great convenience in taking off the full supers; it is possible by its use to rob the bees without being stung. This device is a board which is slipped between the hive body and the super about 24 hours before taking off the honey. The board has a trap in the middle which allows the bees to go down into the brood chamber, but prevents their coming back into the super. When the bees are all out of the super, removing it from the hive is a very simple matter.

Another device which is necessary to secure honey free from brood cells is the queen excluder. This excluder fits between the brood chamber and the super; it has meshes which allow the bees to enter the super but will not admit the queen.

It is impossible to quote prices on these fixtures, as they are subject to change upward without notice. Houses selling bee supplies will furnish lists. (The next article in the series will deal with the management of the apiary.)

CHINESE TOYS STILL MADE SAME AS 100 YEARS AGO

Children in Flowery Kingdom All Celebrate Birthdays on Chinese New Years, No Matter When They Are Born.

BY ELIZA CURTIS.

CANTON, China, Aug. 17.—(Special.)—Do you give your children toys on their birthdays?

The Chinese do. And so shall I hereafter, because away out here, thousands of miles from my home in the United States, I have learned how much happiness it gives children and how joyfully they look forward to their birthday toys.

There will be a considerable difference in more ways than one. I will naturally give American-made toys to my American children and while I will give on three different dates during each year, the Chinese children get their birthday toys all on the same day—the Chinese New Year—because no matter on what day of the year a Chinese child is born, its birthday is celebrated on the Chinese New Year day. The child's age is figured from New Year day to New Year day and, furthermore, the Chinese child is called one year old on the day of its birth and one year older on the first New Year day after its birth, so that if a Chinese baby is born in August of this year it will be considered to be 1 year old at that time and on the next Chinese New Year it will be 2 years old, even though it has actually lived only a few months.

Chinese Toys Antiquated.

Then again the American toys which I will give my children will be very different from the toys which the Chinese children receive. The Chinese toys are still like the toys of 100 years ago and would not be very well liked by our American children, whereas the very few American toys that find their way into China are the very toys that Chinese children love best, particularly the American toys that are mechanical or self-propelling, strong wagons and dolls that open and close their eye and say "Mamma" when squeezed. Wooden puzzles made in the United States sometimes get into the hands of the older Chinese children through missionaries and American traders and are very popular.

I became very much interested in Chinese children and particularly in their play and playthings. Most of their little games are based upon local conditions and are hard for a foreigner to understand, but their playthings can be bought and studied.

My own children have always kept me busy since their babyhood in trying to discover just what kind of toys and playthings they wanted most and which were best for them.

Playthings Child Necessaries.

My mother, who was a kindergarten teacher at one time, has often said that her experience proved conclusively to her that playthings are as necessary to child life as food and that the toys and general playthings a child had in early life had a very great deal to do with the building of the child's character.

Girls learn housewifery and motherhood from their toy houses, dishes and dolls with the dresses and toy irons and washers that go with them. They also learn something of social intercourse from the child tea parties that they give and something of the practical business end of housekeeping when playing store.

Boys learn agriculture from toy shovels, hoes, rakes and the like or building from toy blocks and later with hammer, saw and nails. They learn in a like way other things from proper playthings which are equally beneficial in character building. American toys and playthings constitute a far greater power in proper child development than the playthings of any other nation, as I have been able to prove by my observation of children and their playthings in many countries.

Chinese Toys Without Character.

Here in China the toys and playthings have little character and are therefore of little value in child development, but they serve to keep the children quiet, amused and out of mischief, which in itself is a big point.

It is difficult to pick out the most interesting of my experiences in studying Chinese children and their playthings and play habits, but one which I particularly remember was encountering in a small, crooked, dirty back alley of Shanghai a street vender of toys who blew with the aid of a thin seed pipe and a bowl of soft taffy almost any kind of candy animal of known or unknown variety, boys, boats, babies, much as a glass blower makes articles of glass at a county fair.

The Chinese children bought these taffy toys for a small fraction of a cent in our money or a few "cash" in Chinese money. They played with them until they grew tired of them and then the toys disappeared into their little stomachs.

Crude Toys Please.

While my children and your children at home play with substantially made toys that are often both artistic and expensive, the Chinese children are content with toys that are very crude in shape and workmanship and usually flimsy and exceedingly cheap—the equivalent of 14 cents in our money being an extravagant price for a Chinese toy.

A popular Chinese doll, for instance, sells for about 3 cents in our money, while the cost of a gingham cat or dog is hard to compute in our money, being only a small fraction of a cent.

Babies' rattles are made of clay in the supposed form of many varieties of known and imaginary animals. They much resemble the Egyptian rattles of 2000 B. C. Some rattles of clay are in the form of fat little Chinese priests or round Chinese babies. The nearest approach to a native mechanical toy which I found was a good-sized paper lantern having at the top a paper wheel hung on a light bamboo cross bar, to the ends of which were attached a paper man and a paper woman. These figures revolved through the heat of the burning candle an dthe air current it created.

Some Dolls Cry and Dance.

Some Chinese rag dolls have sewed on noses and ears of paper pasted roughly on, with eyes and other features crudely painted. Other dolls have papier mache heads and leather bodies, with arms and legs of sun-dried clay, and a few have real hair "in spots," in imitation of the manner in which a Chinese baby's head is shaved. Still others—much prized—have bellows-like bodies inside of which is a whistle made of a piece of swamp reed.

Ths doll emits a doleful, squeaky whistle when pressed. It represents the nearest approach to a Chinese "mamma" doll. The costuming of Chinese dolls consists generally of a sort of chest protector and a pair of trousers, which is the costume generally worn in summer by Chinese children, who call their dolls "little people."

One Chinese doll novelty, which I have also seen in Mexico and which American top manufacturers might copy with profit, is the dancing doll. It is only about one and a half inches high, with fine wire legs protruding a sixteenth of an inch below a paper skirt and with no pretense of beauty. A number of these dolls are placed on a brass tray and then the edge of the tray is struck lightly with a stick to make it vibrate and the wire-legged dolls dance around very amusingly in all directions.

The only Chinese toy that is as good if not better than the American or European kind is the bamboo top, which is "whipped" or spun with a string.

Custom Old as the Ages.

When I get back home this fall and begin the birthday toy habit in my home my children will miss one benfit at least of the Chinese children which results from a local Chinese custom as old as the ages. One month after a Chinese child is born a "party" is given for it by its parents. To this party is invited all of the many relatives of the infant down to its fourth and fifth cousins. At this affair the baby gets its "milk" name, which is changed at about the age of 14 to something probably entirely different. All the invited guests are expected to attend and give presents of toys, clothing or money. It starts the baby off in life with a pretty good supply of simple toys, but he or she gets the "birthday" toys just the same on their New Year day.

In coming to China by way of India I passed through Italy and learned that Italian children receive not only birthday toys, but toys of all kinds on the many "feast" days. I do not know whether the idea originated in Italy or China, but I like it.

INDIAN PAGEANT PLANNED

Lee Moorhouse of Pendleton to Supervise Historical Representation.

PENDLETON, Or., Aug. 7.—(Special.)—Major Lee Moorhouse, veteran Indian fighter of the northwest, will leave Pendleton Monday for Seaside, where he will supervise the Indian features of the pageant to be presented there August 13 and 14.

Major Moorhouse will take 25 of the most elaborate Indian costumes to lend color to the pageant, which is to be a historical representation of the ending of the Lewis and Clarke trail. Last year Major Moorhouse superintended the Indian feature in Portland under the direction of Mrs. Adah Losh Rose.

PIONEER DAY THURSDAY

Centralia to Send Big Delegation to Rochester for Picnic.

CENTRALIA, Wash., Aug. 7.—(Special.)—The Centralia chamber of commerce will send a big delegation to the annual pioneer day celebration to be held at Rochester Thursday, August 12. The local chamber was largely instrumental in the organization of the Southwest Washington Pioneer association, under whose auspices the picnic will be held.

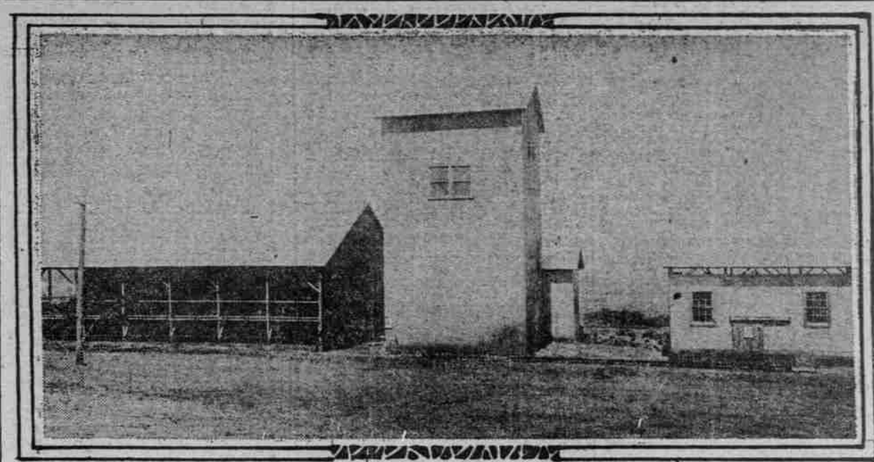
Governor Hart, Representative Johnson, State Land Commissioner Savidge and State Senator Judd have accepted invitations to speak at the picnic.

Scouts to Take Week's Hike.

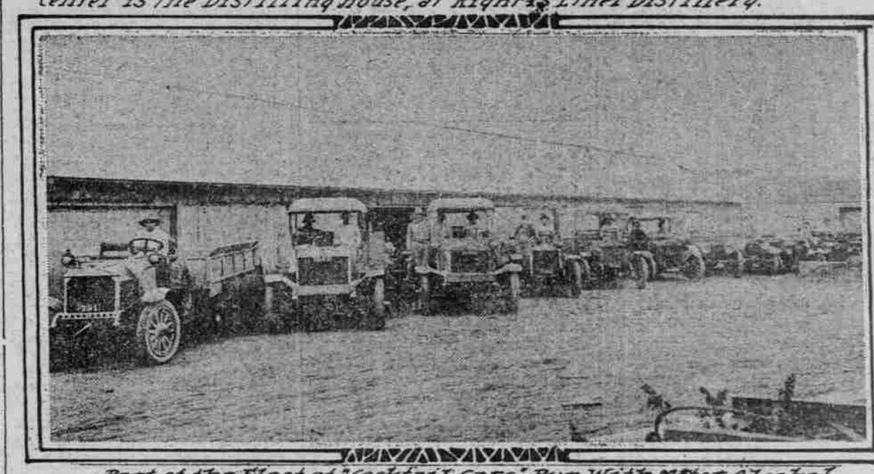
CENTRALIA, Wash., Aug. 7.—(Special.)—About 15 Centralia Boy Scouts will leave Monday morning on a week's hike through Lewis, Cowlitz and Wahkiakum counties. Final plans for the trip were made at a meeting held last night.

ALCOHOL USED IN HAWAII AS SUBSTITUTE FOR GASOLINE IN OPERATING AUTOMOBILES

Fluid Developed From Molasses Obtained From Cane By-Products, Which, Mixed With Ether and Other Substances, Proves Effective Substitute and Is Sold at 8 Cents a Gallon—Used Generally on Island.



Where Motor Alcohol is Made. At Left is Fermenting House, in the Center is the Distilling House, at Right is Ether Distillery.



Part of the Fleet of "Cocktail Cars" Run With Motor Alcohol

TLIVVERING has become almost a luxury since the price of gasoline has risen with such enormous leaps and bounds. That is, flivvering in the United States. But down in Hawaii, which has become more or less famous via the medium of the hula-hula and ukuleles, automobile jovriders are pooh-poohing gasoline and its almost prohibitive price. For in that section of the world they now flit about in their automobiles on a substitute that costs but 8 cents a gallon. This substitute is none other than that which has caused such a hullaballoo from Maine to Florida and from New York to California, namely, alcohol. For if alcohol cannot be fed to the human there is no law as yet which forbids feeding it to motor vehicles with the result that King Alcohol, scorned by our uplifters, has at last come into its own.

In short, the gasoline shortage question is solved. Urged on by the reports that the supply of gasoline for fuel purposes in the United States is failing and that there will be no gasoline for automobile consumption within a few years, Hawaiian sugar cane growers have developed, from molasses obtained from cane by-products, an alcohol fluid, which, mixed with ether and other substances, is proving a most effective substitute.

It has already become successful and the Hawaiian islands have now become independent of American gasoline producers and will, within a short space of time, be in a position to supply the continental market with the new and inexpensive substitute.

Cost Is 8 Cents a Gallon.

For the past several months large agricultural companies on the island of Maui have operated their fleets of trucks on this substitute at a cost of only 8 cents a gallon. The new fuel, the process of manufacture of which has been invented by J. P. Foxter, superintendent of the Maui Agricultural company, is not only cheap, but it has other advantages. The trucks using it have been found to operate with 20 per cent more power and no cylinder trouble has been experienced. Besides, the new fuel is reported to make for cleaner cylinders.

The first plant erected in Hawaii was started in July, 1917, at a time when it seemed certain that a continuance of the war would bring about a shortage or failure of the gasoline supply and a consequent hindrance in agricultural operations.

The raw material used for the gasoline substitute was cane sugar molasses, and, due to the war demand for alcohol and its derivations, it was found much more profitable to ship this molasses in tankers to the mainland. At the end of hostilities the price of molasses resumed a normal level and the operation of the substitute plant was resumed. The production was so satisfactory that that plant was enlarged from its original capacity of 350 gallons daily to more than double that amount.

The process followed is that of fermenting the raw material and distilling it into ethyl alcohol. The alcohol is taken in charge by officers of the internal revenue, and by them denatured, or rendered unfit for beverage use, after which a portion of the alcohol is redistilled into ethyl ether, which is then mixed back into the alcohol, thus forming the motor alcohol. The latter gives results in mileage which are fully equal to, or better than, those obtained from gasoline, and can be made of any material capable of alcoholic fermentation, which means that there is an annually renewable supply wherever there is soil, water and sunlight.

Fuel Shortage Overcome.

In Hawaii the chief sources of supply are the molasses from the sugar factories and the refuse from the pineapple canneries which are together sufficient to supply all the needs of the territory. In addition to the distillery of the Maui Agricultural company, there is another now being erected by the Hawaii mills, and a third by the California Packers' corporation, which will produce about 1500 gallons daily from the pineapple refuse from their great cannery in Honolulu. Many other distilleries are being contemplated for Hawaii and two are being now considered for erection near Manila, P. I.

Necessity is said to be the mother of invention and it is probably because of that fact that Hawaii has come to the fore with her gasoline substitute. Modern industrialism is founded upon iron and the heat to smelt that iron which may come from coal, gas, or water power, the three great sources of natural energy. In all of these the Hawaiian Islands have been short to the point of destitution. Every pound of fuel, outside of some firewood and bugasse used mostly for domestic purposes, has to be imported.

Because of this fact the experiments which have culminated in the new product were first begun. And although the territory has been lacking in fuel, it does, however, possess fuel resources of very considerable extent now that motor alcohol has become a reality. Hawaii annually turns out about 135,000 tons of molasses. From each of these tons there can be produced approximately 67 gallons of 95 per cent alcohol, or a total of about 9,000,000 gallons, which may be used for any purpose for which gasoline or engine distillate are suitable.

Many substances have been tried for gasoline, but of them all alcohol has proved the most promising. This fact is no doubt brought about by the similarity of the fundamental principles involved. Gasoline and alcohol engines are built and operated on exactly the same principles and the action of the two fuels is relatively the same. Explosive mixtures of the vapors of gasoline and of alcohol with air are formed in the same manner, and the subsequent burning of these explosive mixtures in the engine cylinders takes place in a similar way and with similar results.

In addition to the fundamental similarity, alcohol possesses advantages that are not found in gasoline. The raw material for the manufacture is annually reproduced by nature in all places where earth, water and sunshine are found. Its storage and use are less restricted by insurance companies than in the case of gasoline. In the case of fire it can be readily extinguished by water and it mixes in all proportions with water and will continue to operate an engine even when diluted to 50 per cent water.

Less Heat Is Generated.

Another important factor is that it generates less heat of combustion, consequently causing less cooling water, the cylinder temperatures are lower with the result that cylinder lubrication difficulties are eliminated and carbon deposits are prevented, making for cleaner cylinders. There is less vibration, smoother operation and absence of pre-ignition knocking when the substitute is in use.

The use of ordinary denatured alcohol in gasoline burning engines is attended with some difficulties for the following reasons: In the first place being of much lower volatility than gasoline, an explosive mixture of air and alcohol vapor is difficult to create at ordinary temperatures, hence there is difficulty in starting the engine when cold.

Secondly, an explosive mixture of alcohol and air is formed in a very different ratio than that of air and gasoline, the former being from 3½ to 11½ parts of air to one of alcohol by weight, and the latter from 13 to 23 parts of air to one of gasoline by weight, when used at the same compression.

Thirdly, an explosive mixture of air and alcohol vapor is formed within narrower limits than the mixture of air and gasoline, consequently the engine has a much lessened speed flexibility.

Analysis of these difficulties, however, showed that they were due primarily to three causes, which were low volatility, low vapor pressure and low range of explosive mixture with air. It was readily seen that if these three deficiences in alcohol could be overcome by the addition of some substance soluble in alcohol which would supply the needed characteristics to alcohol with no added disadvantages alcohol would immediately become a much more valuable fuel because instantly adaptable to an ordinary gasoline engine.

Fluid Is Volatile.

The difficulties have been done away with, however, with the aid of ether, which is now being used in the motor alcohol in Hawaii. It will mix with alcohol in all proportions and large percentage of water.

It is very volatile, has a high vapor pressure and an extremely wide range of explosive mixture with air, has a high thermal value, burns with no solid products of combustion and is easily and cheaply produced wherever acohol is available. It is therefore possible to produce a mixture of alcohol and ether in such proportions as to form an ideal fuel for gasoline engines, giving great power, speed and flexibility combined with smoothness of operation and ease of starting.

The result is that the mixture becomes a true gasoline substitute which may be instantly substituted for gasoline and which gives the same or better results without modification of the engine or its accessories and with no change in ordinary methods of manipulation.

The motor alcohol made according to the new formula has been manufactured in Hawaii and subjected to successful tests in stationary, marine, automobile, truck and tractor gasoline engines. In a 36-hour test made on a 75-horse power Holt caterpillar tractor equipped with an ordinary Ensign carburetor it pulled two Holt disc plows with ten 28-inch-diameter discs. The alcohol consumption was four gallons per hour as compared with four and a half gallons of distillate on similar work. With the motor alcohol the speed of the tractor was higher and it developed more power than with distillate. The cylinders were opened and examined at the conclusion of the test and the old carbon deposit was found to be almost entirely removed, and it was found that the carbon remaining was so softened that it could be picked off with the fingers.

Plantations which are at present running their molasses to waste or burning it for the potash recovery would find the manufacture of motor alcohol a very profitable undertaking.

There is much unnecessary apprehension as to the internal revenue regulations regarding distilleries. A certain minimum amount of regulation and supervision is necessary to prevent illicit use of the alcohol, but this supervision is entirely at the expense of the government and the distiller will find that the internal revenue bureau, through its Honolulu representative, Colonel Hataway, is not only willing but anxious to co-operate in every way and to extend every possible courtesy.

MUNICIPAL OWNERSHIP TENDS TO DISSATISFY ALL EMPLOYES

If Portland Owned Public Utility Companies There Would be Enough Employes in These Plants to Control Politics of City, Says Writer.

A DEMOCRATIC government is unfitted in its very nature to conduct a business through municipal ownership. Such a government must be easily changed at the will of the majority vote. The officers must be elected at short periods. The length of their term of office must also depend upon the will of the voters. A large business to be effective necessarily entails centralization of authority in the head of the business. An autocratic form of government lends itself more readily to municipal ownership than does that of a democracy.

This necessary concentration, in street railway companies, express companies and railroad companies were under the control of the City of Portland there would be enough employes in the municipally owned or controlled plants to easily control the politics of the city.

Undoubtedly such employes would organize and insist that the candidates for the city offices should increase their wages before they would give them their support.

And a candidate who would refuse to assist them would have their united opposition. This would undoubtedly defeat such candidates for the city offices.

Evils Would Develop.

Again, the charter itself could be changed by the united voice of such employes and made favorable to themselves. They could prolong the length of office of the city officers to such an extent as to make it nearly impossible for other citizens to change the control of such officers or change the city government.

Out of this would grow a contest between the persons who are not in municipal positions and the outside citizens. All kinds of evils would grow up under such a system and the independent voter or the voter who is not in a municipal position would become antagonistic to the government of the city.

Efficiency would be lost sight of under such a system. The evils that grow up in any business would, under such a form, be nearly impossible of correction.

If such control occur in all the large cities of the United States and in the state governments as well and in the United States government also, undoubtedly a combination would be formed between the persons who are under city, state or United States government and they would become a body of citizens opposed to any change of any kind whatsoever in governmental matters which did not tend to their individual advancement.

Thus the independent worker or the worker who was not in the state's employ would tend to be unfriendly and opposed to the government under which he lived and, if he were unable to change it or to make laws to protect himself, he would be found in rebellion against the form of government that such a system would create. The courts, being appointed by officers of the government under the control of such employes, would tend to support the changes initiated by such employes in the government.

Municipal ownership is a principle diametrically opposed to our system of government. In an indirect form it is the same as militarism, because the country is controlled by the employes of the government and it would be a short step for this municipally controlled government to employ sufficient citizens in its military department to carry out its purposes.

Emphasis Laid on Wrong Point.

It is a very different thing for a government to carry on municipally certain small enterprises where there is a large body of independent voters and a very small number of municipal employes from what it would be where all large public utilities and railroads and all their employes are under the control of the government.

The reason is that the small body of municipal employes has no real political influence, whereas if they were large enough in number to be able to become the balance of power in political matters a very different situation would arise.

Efficiency in work is nearly the sole test for advancement in private business at the present time, but under such new system efficiency in politics would be the means of advancement rather than efficiency in work.

Thus the emphasis is laid on the wrong point and tends inevitably to decrease production and create slow and unprofitable methods, continue the use of old and obsolete machinery and destroy initiative in the individual.

Christian Science Church Is Donee.

SEATTLE, Aug. 7.—Bequests to the fourth Church of Christ, Scientist, Seattle, and $50,000 for the founding and maintenance of a Puget Sound auxiliary of the Christian Science Benevolent association are included in the will of Frederick S. Sylvester filed for probate here Friday. Mr. Sylvester died in Seattle recently.

Correct Glasses

All Opticians and Optometrists CLAIM to make them—

I Make the Eyes Prove the Glasses Are Correct or They Do not Leave My Establishment.

If your glasses are correct you can see clearly and comfortably with them. If not, the glasses should be discarded and CORRECT GLASSES worn. Otherwise your eyes may be permanently injured. CATARACT and other serious ailments can often be traced to poorly fitted glasses.

Long experience and a knowledge of the use of scientific optical instruments enable me to furnish you with Perfect-Fitting Glasses.

You should not fail to see "Through Life's Windows" at the Hippodrome all this week.

Dr. Wheat
Eyesight Specialist
2d Floor Morgan Bldg.
Entrance
346½ Washington St.