

clear to stand for a short time. The clear layer is then drawn off for evaporation. This process is to be preferred since heat hastens clarification.

A patent pan evaporator can be bought on the market. Do not put too much sirup in the evaporator at once as this layer takes two inches of space. If an evaporator is used, place alongside the pan when installed, the scum can be raked off into this.

In starting a patent evaporator have water in all parts of the tank. The finished sirup cooling should have a moisture content of not over 30 per cent. One gallon should weigh 13.5 lbs. The boiling point is the liquid thickness the boiling point is raised. Water at ordinary pressure boils at 212 degrees Fahrenheit, while a 30 per cent solution of sirup boils at more than 30 per cent above that. When the boiling point changes from 212 degrees Fahrenheit to 240 degrees Fahrenheit, the sirup is ready to remove from the fire. If an accurate thermometer is placed in the boiling sirup a rough estimate of the moisture content can be made. In taking the temperature do not allow the bulb of the thermometer to touch the bottom or sides of the evaporator. Immerse the bulb in the sirup and a better grade. The sirup can be placed in tin, glass or wooden containers but these should have the surface of the sirup.

**Summum for Forage.**  
Since the foliage of sorghum remains green until the heads are mature, a fair quality of coarse forage can be secured. It is cut at the same time as for sirup, that is, ten days to two weeks after corn planting time. Sorghum for forage is either sown thick in drills four to five feet apart, or at rate of 15 pounds seed per acre and cultivated, or sown with the grain drill or broadcast at the rate of one bushel per acre. It is cultivated in rows the best method of harvesting is with a corn binder and the bundles set up in small shocks may be set together in a row for curing. The top is cut off when the stalks are dry. When sown broadcast the crop is cut with a mower or grain binder and handled as coarse hay. When cut with a mower the bundles should be left as this facilitates drying and gathering the heavy fodder with a hay rake. Heavy sorghum hay is very slow to rot. Feed it for one or two weeks in swath before raking and curing and should be thoroughly cured in racks before stacking. The average yield carries from 4 to 9 tons per acre.

### WAR IS BRINGING IT RETURN OF OLD-TIME POPULARITY.

**EARLY AMBER IS THE BEST**  
In Early Maturing Variety and is Most Suited to Michigan Climatic Conditions.

From Department of Farm Crops Michigan Agricultural College.

East Lansing, Mich.—One of the many interesting minor effects of the war upon Michigan agriculture which is the southern and central portions of the state appears to be that generally, is a growing demand among farmers for sorghum seed. This demand has already assumed such unprecedented proportions that some sections are forecasting that if it continues, as now seems not unlikely, the visible (April) supply will all of it be moved away long before the planting season arrives.

Sorghum, as a crop both for feed and sirup-making is, however, by no means a new crop in Michigan. There was a time not so long ago in fact when the sorghum press, where the straw was squeezed out of the cane, was just as common a feature of Michigan's rural communities as the cider mill—and for that matter there are still some sections where the cane is raised sorghum to supply sweetens for the family table.

But there will be many more farms than ever before engaged in the production, for with sugar daily growing scarcer and commanding a price which compels the utmost economy, corn stalks and sorghum will be raised in place on the family table, and a ready sale on the market.

The seed corn shortage is at the same time, and if the demand is not to consider the advisability of putting in sorghum as a forage crop—though the dearth of sorghum seed is almost entirely due to its not being raised in the seed corn shortage.

**What and When to Plant.**  
Sorghums are planted from ten days to two weeks after corn, for the seeds are small and if the ground is not very dry they do not germinate well and a poor stand results. Early amber, an early maturing variety, is probably the best adapted to Michigan conditions. The land is prepared for sorghum in much the same way as for corn. The crop makes a slow growth at first and it is essential to get the plants four to five weeks as possible before planting. For sirup the rows are drilled 36 to 42 inches apart with a corn planter, using 6 to 8 pounds of seed per acre.

The method of cultivation is the same as for corn. The first cultivation can be given with spike tooth harrow, and is quite shallow. In killing young weeds. The next cultivation should be with shovels or sweeps. The first two or three shallow cultivations follow.

**Harvesting For Sirup.**  
Sorghum increases in percentage of sugar as well as in total dry matter until it is mature. From the early stage stage until the heavy milk stage is the right time for sirup making. If the seeds become hard there is danger of frost before all of the canes are cut down, while if the seeds are still in the milk stage an acid sirup with an unripe taste is produced. For best results the leaves are stripped while the canes are standing. The top is cut with six or eight inches of the upper cane should be cut off, as this part contains many impurities. Suckers should be discarded for the seed. Cane may be cut by hand, or with the corn binder.

In warm weather canes should not be cut, as they are in danger of fermentation. When a heavy frost occurs the sorghum should be cut and placed in large shocks at once. As the weather will do but little damage provided the canes can be worked up at once upon thawing but after that time they will spoil in a very short time. Cane will yield 500 to 1,000 pounds of juice which will make 8 to 25 gallons of sirup to eight tons of cane per acre is a good yield.

**Making Sirup.**  
The sirup manufacturing process consists of three main steps—(1) Extraction of juice, (2) clarification of the raw juice and (3) evaporation of the sirup. The extraction is done by passing the cane between rollers. Two-roller and three-roller mills can be purchased. Seventy to 80 per cent of the cane is water, but it is not possible to obtain all of this juice. With a three-roller mill 60 per cent of the juice of the cane should be obtained unless the cane is very hard and dry. The juice after being passed through the rollers can be used for roughing out the sirup or it can be put in the site either with corn or alone. The juice as it comes from the mill should be run through a strainer made of wire mesh (the same as is used for straining milk) into a settling tank or barrel. The strainer should be made of three to five meshes. There should be three tanks, one below the other, one being emptied and the third setting. Raw juice holds in solution a large amount of impurities, which settle slowly on the bottom. Some makers provide screens to the settling by heating. The juice can be used for roughing out the sirup and the heating point and then the heat is turned off and the juice al-

## Coalless Monday

A laugh came back through the telephone. "Everybody wants the January. The last I heard he had gone out to try and buy 500 tons. I dare say you'll meet him here, that is, if he ain't frozen to death in your apartment. You know it won't do any good to kick, but, like me, nothing else will keep you warm."

There was no answer. Freda Tilson's receiver slammed back on the hook that held it, and as she had been inclined to herself, her little apartment she might have muttered something about an impatient creature who dared to talk to a girl who was so busy with her work that she hadn't the most remote idea who it was. That would have been a fib, however, for she really did know that it was the man who had been in the bachelor state in the somewhat more spacious and luxurious apartment in front of her own, the greater luxury and higher rent she had been paying due to the fact that while he managed to draw to himself a weekly check for \$75 for writing "thrillers" for a publisher in the "downtown" district to the tune of sixty a month.

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**COUNTRY PASTORS TO MEET**  
Annual Conference Will Be Conducted at M. A. C. Takes Up War Problems.

East Lansing, Mich.—Country pastors from all over the state are meeting here to consider the advisability of putting in sorghum as a forage crop—though the dearth of sorghum seed is almost entirely due to its not being raised in the seed corn shortage.

**Public Building Architecture.**  
It is an unfortunate circumstance that the concept of "architecture," to the general public, is limited to libraries, art galleries and other public buildings. These they feel, are "architecture." And "architecture," to the public, is limited to libraries, art galleries and other public buildings. These they feel, are "architecture."

**High Cost of Patches.**  
You may have a frugal wife who persists in patching your trousers, but you are not so frugal as she is when it comes to such garments. They make you feel like a thief, or like 20 cents in counterfeit money. You are forever trying to get them from view. The more you work them and I know how uneasy a man feels in good company when his coat tails aside, owing to a wife's needless zeal. Jim writes in Cartoons: A patch in the seat of your trousers. If you are feeling a little better, you will reduce your market value 20 per cent. If you cannot afford so sudden and enormous a decline in your market value, you had better accept a wife's advice and unload your holey belongings upon the ragman before your wife has had time to darn them and patch them.

**Strenuous Reform.**  
"Tommy, you mustn't play with that little Gruppibus boy. His manners need to be reformed."

"That's all right, ma. I'm working on his manners. If they don't improve in a day or two I lose my standing as the hardest little kid in my block."

**Female Finance.**  
"He—You must remember, dear, we are just getting out in life and we must economize."

She—But don't you think getting into debt is the best way? Then we'd have to economize."

**So We've Noticed.**  
Man, you show us just very strong carries round a big notion of himself.—Boston Transcript.

## GERMAN DRIVE IS HALTED

Washington—President Wilson personally has told the members of the war council in the war department and Gen. Goetz, chief of the transport department, that the army is now in an American camp moved now to Europe before Christmas.

This (Friday) morning the movement of 1,500,000 men and more than two-thirds of the force still in American camps of its transit to ports of embarkation. Several hundred troops are being moved along the east coast.

**Big Drive At Standstill.**  
London—Germany's great drive into the west, after two months' Franco-German fighting, has come to a standstill. Her first great onslaught appears to have been stemmed with large gains of territory, but the German army has not advanced in men and material depleted.

Meanwhile 100,000 American soldiers are being brought across the ocean to join the fight against the invader and to drive him back. The American troops are now under command of Gen. Pershing and his headquarters in the fighting area has not been disclosed. They are seasoned troops and are reported as anxious to get into the fight.

**Perishings Offer of Help Accepted.**  
Paris.—The French government has decided to accept the offer extending to the United States of America, under the name of the United States government, says an official note issued Sunday dealing with operation of American troops with the French and British.

"The American troops will fight side by side with the British and French troops in the battle of the Somme. It will float beside the French and English flags in the plains of Picardy."

**Great activity of many sorts is in progress in the entire American zone.** Miles of motor trucks filled with extra soldiers are being sent to the towns, some going in one direction, some in another. In many places, through a driving rain, the muddy trucks had American flags fastened to their boards. The trucks were splashed into mud, and the mud splashed onto the mud, which could cover their ankles.

The German forces are working as hard as possible with the machine that they are to be of service in the common effort.

**Manitoba Value of Field Crops 1917.**  
Manitoba ..... \$ 143,537  
Saskatchewan 129,270,000 136,488,200  
Alberta ..... 46,712,000 370,958,500

Total ..... \$240,545,000 506,975,500

The total value of field crops for 1917 was \$240,545,000, produced on less than 10,000,000 acres.

Further evidence of prosperity and progress is found in the Government estimate of the value of farm lands, and increase in value since 1908:

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**BITS OF INFORMATION**  
A violin has been invented that is enclosed within a walking stick, a slide covering one side of the cane being withdrawn to expose the strings. The quality and volume of the sound produced is said to be as good as that of a violin.

According to medical authorities in the Philippines the increase in pulmonary diseases in the islands is due to dust raised by automobiles.

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