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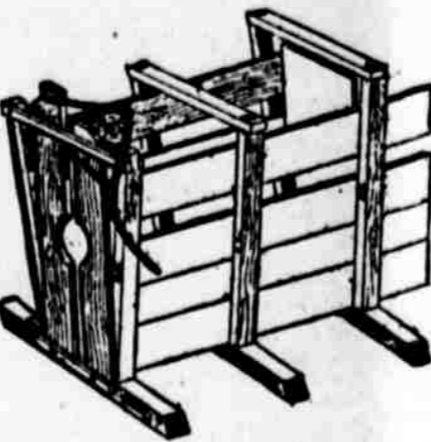
VISIT SPOKANE. When you do, visit THE CRESCENT,  
 its model store, and one of the most interesting show places in  
 what Elbert Hubbard has called the model city of America.

Visitors will find here a Bureau of Information where  
 reliable information of all kinds regarding the city may  
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 Telephones and comfortable waiting rooms with lavat-  
 oiries for women.

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 all Pullman coaches.



**Rack for Dehorning.**  
 The illustration shows a rack to be  
 used either for dehorning cattle or  
 ringing hogs. For sills use three pieces  
 4 feet long and 4 inches by 4 inches  
 mortised for bottom of posts 8 inches  
 each side of center to allow the sides  
 and bottom boards to drop into place.  
 Four posts 4 inches by 4 inches and 5  
 feet 4 inches long and two posts 4  
 inches by 4 inches, and 5 feet 8 inches  
 are tenoned to the sills. Three  
 cap pieces 2 inches by 4 inches and 4  
 feet 2 inches long are mortised at the  
 ends to receive tops of posts. The caps  
 are of oak. One oak piece in front of  
 the cap, which holds the stanchion, is  
 2 inches by 2 inches, and 4 feet 2 inches  
 long. The lower oak piece in front of  
 the stanchion is 2 inches by 4 inches  
 and 2 feet long. The lumber is 2 inches  
 thick and 7 feet long for sides. One  
 board 2 inches by 17 inches and 7 feet



RACK FOR DEHORNING.

long is used for the bottom. For  
 stanchions in front use one board 2  
 inches by 10 inches, 5 feet 6 inches  
 long; one board 2 inches by 10 inches,  
 5 feet 2 inches long. For back gate  
 use two pieces 2 inches by 12 inches, 4  
 feet 4 inches long, cut sloping to fit the  
 frame. It is put on with hinges. The  
 stanchions in front are bolted at the  
 bottom between a 2 inches by 4 inch  
 piece, and the sill, leaving a space up  
 and down in front 5 inches wide. Two  
 and a half feet from the bottom of the  
 stanchion slope, cut a place for the  
 animal's neck. The 2 inches by 2 inch  
 oak piece is bolted to the side of the  
 cap with blocks to allow the top of  
 the stanchions to open and close and  
 work with a lever. The lever, which  
 can be made of wagon tire, is 5 feet 6  
 inches long. A 3/4-inch hole is punched  
 in the top of the lever, a second hole  
 13 1/2 inches from top hole, and the  
 third hole 11 inches from second hole.  
 The upper hole is for attachment of two  
 iron straps, one on each side, which  
 are fastened to the left hand stanchion.  
 From the lower hole two pieces of iron  
 14 inches long go to the right hand  
 stanchion. When the stanchions are  
 closed bore one or two half-inch holes  
 in post back of lever, in which to use  
 an iron pin to hold the stanchions in  
 place.—Montreal Star.

**Water and Salt for Cows.**  
 Eight gallons of water a day is the  
 average quantity required for a cow,  
 and the milk given is about 87 per cent  
 water. In some pastures there is no  
 water, the cows being supplied night  
 and morning, which forces each cow to  
 drink four gallons at a time in order  
 to be supplied. As the cow does not  
 know that she must drink four gallons,  
 she may use less, and she will reduce  
 her milk supply accordingly.

Extensive tests and investigations  
 have been made by the experiment sta-  
 tions to determine the advisability of  
 adding salt to the ration of dairy  
 cows. As a result of these trials, it is  
 recommended that dairy cows be given  
 at least one ounce of salt per day. Ex-  
 ceptionally heavy milkers will require  
 more than this. The uniform results  
 obtained with all cows employed in  
 these trials indicate that salt in addi-  
 tion to that obtained in their food is  
 absolutely essential to the continued  
 health of a dairy cow, while producing  
 milk. It is evident, moreover, that  
 the amount of salt which must be sup-  
 plied directly will greatly vary in dif-  
 ferent localities, it being more at high  
 elevations and at places remote from  
 the sea.—Agricultural Epitomist.

**A Kettle Support.**  
 At butchering time and whenever  
 water is to be heated it is a bother to  
 set the kettle or to hang it with chains.  
 A simple hoop with three or four  
 legs welded on, saves the time and  
 trouble. Any blacksmith will make it  
 for a few cents if you furnish an old  
 cart tire for hoops  
 and legs. Order the legs the right  
 length to hold the kettle just high  
 enough. It is easily moved then from  
 house to barn, or to a neighbor's.—  
 Farm and Home.



KETTLE HOOP.

**Kaffir Corn in Mexico.**  
 Kaffir corn is being cultivated suc-  
 cessfully in the State of Oaxaca, Mex-  
 ico, and its cultivation is to be extend-  
 ed. This corn, which is a native of  
 Egypt, requires only the moisture of  
 the dew for its wants, and appeals to  
 the farmer for planting during the dry  
 season.

**Treatment of the Soil.**  
 We have but little more definite  
 knowledge of the soil and the principles  
 involved in its treatment than we had  
 sixty years ago, says the Scientific  
 American. Fertility is not nitrogen,  
 phosphorus, and potassium alone,  
 though the potential value of any field,  
 or State, or country, from the agricul-  
 tural standpoint, is measured by these  
 constituent elements in its soil; yet it  
 has been demonstrated that soils which  
 contain an abundance of these elements,  
 and which are potentially capable of  
 producing crops for centuries perhaps,  
 are not capable of producing profitable  
 crops without the addition of further  
 amounts of these constituents. The  
 chemical investigator is, therefore, com-  
 pelled to take into consideration other  
 facts than this. He must, if he would  
 cover the whole field, know something  
 of geology, of botany, of physics, of  
 biology, of bacteriology, and of the  
 other natural sciences, because chem-  
 istry alone is not capable of fully com-  
 passing the problem; thus, the oppor-  
 tunity for specializing in any branch  
 has been very great, and it is because  
 of the broadness of the subject, and  
 the opportunity, as already pointed out,  
 and the necessity, also, for giving im-  
 mediate help from the knowledge that we  
 have that has prevented in a degree a  
 broad study of the fundamentals essen-  
 tial for enabling genuine progress to be  
 made.

**Alfalfa a Swine Tonic.**  
 Raising 1,000 hogs a year without  
 ever having any sign of cholera in the  
 herd is the claim put forth by M. Bar-  
 ber of Bloomington, Neb. He makes a  
 specialty of this industry and has 300  
 acres of alfalfa, where the hogs are  
 raised.

"My hogs are raised in the field from  
 the time they are pigs till they are  
 about 8 months old, when I put them  
 on a feed of corn," said Mr Barber to  
 a representative of the Kansas City  
 Drovers' Telegram. "If fed in summer  
 time I soak the corn. But the alfalfa  
 is the most important feed they get,  
 and is the one great thing that keeps  
 them healthy all the year around. In  
 all the years that I have been raising  
 and handling hogs in this way, I never  
 had a case of hog cholera on my farm.  
 This is due to the alfalfa, which keeps  
 the hogs healthy."

**Improved Butter Churn.**  
 The old-fashioned hand butter churn,  
 so long associated with fresh air and  
 country life, seems destined to be  
 overtaken by other  
 up to date churns  
 and which require  
 less labor to oper-  
 ate. The old-fash-  
 ioned churn was a  
 clumsy affair, and  
 not a little "elbow  
 grease" was re-  
 quired to manipu-  
 late it. In the il-  
 lustration is shown  
 one of newer hand  
 churns, which nevertheless contains  
 most of the principles of the older  
 churns. The only change is in the  
 application of the power mechanism.  
 In this machine the power is so placed  
 that little effort is required to operate  
 it. A foot pedal is added, and the  
 hand power is entirely different from  
 the old method. Instead of forcing the  
 paddle up from the churn after every  
 descent with the hands, springs are  
 placed beneath the hand grips which  
 do the forcing automatically. It would  
 be possible to operate this churn and  
 at the same time read a book or news-  
 paper.



NEW CHURN.

**Young Farmers Going to Cities.**  
 A recent news telegram from York,  
 Pa., says: "With the return to the  
 county commissioners to-day of the last  
 registry assessor's book it was shown  
 by the totals that the population of  
 voters in the county has decreased in  
 six months nearly 400. The shrinkage  
 in the male population is attributed by  
 the commissioners to the desertion of  
 the farms by young men, most of whom  
 have been lured to Philadelphia and  
 other cities under the impression that  
 they can speedily make fortunes."

**Renovating Worn Soils.**  
 Prof. W. J. Spillman, in bulletin No.  
 245 on the renovation of wornout soils,  
 says:  
 "To build up and maintain fertility  
 in the soil, feed a large part of the  
 crops, and return the manure to the  
 land. If manure is not available, plow  
 under crops grown for the purpose.  
 Plow deep, but do not subsoil. Grow  
 leguminous crops for the nitrogen they  
 add to the soil.  
 "Commercial fertilizers and lime may  
 be important means of improving the  
 soil but the fertilizer requirements of  
 different soils and different crops in  
 different seasons are so little under-  
 stood that we are not yet in a position  
 to make positive recommendations that  
 are of general application."

**The Decline of the Peach.**  
 The introduction of new varieties,  
 budding, and the attacks of insects, as  
 well as diseases formerly unknown,  
 have curtailed the usefulness of the  
 peach tree and confined it to certain  
 localities. Budding or grafting the  
 trees, whether apple, peach or pear, is  
 now but a reproduction of the original  
 variety, and may introduce all the im-  
 perfections as well as the advantages  
 of the variety, to every portion of the  
 country.

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