

FIRES IN SEPARATORS EASILY AND QUICKLY EXTINGUISHED

Efficiency and Practicability of Fire Fighting Devises Demonstrated—Dr. Cardiff Gives Timely Hints on Control of Smut.

Within a few seconds after flames had enveloped the interior of a running separator every spark had been extinguished by a fire extinguisher system perfected by the United States government and the interior woodwork of the machine was not even discolored. A demonstration of the effectiveness of the extinguisher system was given last Friday afternoon at the farm home of Charles Stirewalt, five miles north of Pullman, near Whelan station, and 300 farmers, representing nearly every part of Whitman county, and some coming from as far east as Lewiston and Genesee, were on hand to witness the demonstration. The demonstration was conducted by Elmer Johnson, rural engineer with the Department of Agriculture, and proved conclusively to the assembled farmers that the big loss from separator fires which has marked the past two or three harvest seasons can be reduced to a minimum by ordinary precaution on the part of the machine owners.

The system advocated by Uncle Sam, and demonstrated by the government expert, consists of a 40-gallon tank, which is placed on top of the separator. Into this tank go 37 gallons of water and 17 pounds of common baking soda. On the top of the tank is a smaller receptacle, into which is fitted a two-quart glass jar half submerged in the water, and containing sulphuric acid. From the main tank a one-inch pipe is run the full length of the separator and to the end of the stacker, with automatic valve nozzles at intervals of 30 inches, and set at different angles. A fine wire, connected at different places with fuses, connects with a trigger on the side of the machine. These fuses melt at a temperature of 160 degrees, parting the wire and releasing the trigger, which in turn releases a hammer arrangement, which strikes the glass jar. The acid thus released mixes instantaneously with the soda charged water, forming a gas with a pressure of approximately 80 pounds pressure. The water is thus forced through the pipes and nozzles, which are opened automatically by the pressure, and every part of the interior of the machine is thoroughly drenched with the solution, quenching the fire almost instantly.

The entire system works automatically, no part being taken in the fire fighting by the harvest crew, and its effectiveness is beyond question. For demonstration purposes at the Stirewalt farm large quantities of mill dust were run through the separator to make the conditions as near true to actual harvest conditions as possible. A torch inserted into the inside of the machine ignited the dust particles and straw, although the expected explosion failed to materialize. The system worked perfectly, the machine being kept running, and the solution was forced to every part of the separator.

The entire system was explained in detail by Mr. Johnson. Salient parts of the contrivance are under patent by Uncle Sam, but no restrictions are placed on the manufacture of the appliances by farmers or plumbers, and plans and specifications, with full directions for making, may be secured free of charge upon application. The cost of the appliance is said to be under \$100.

A device perfected by members of the experiment station staff, under practically the same plans as those used in the manufacture of the government attachment, was explained and demonstrated by I. D. Charlton of the State College, who also assisted Mr. Johnson in the demonstration of the government appliance. The college system is said to be just as efficient and thorough as Uncle Sam's patent, and its cost is much less, thus making it more available to the farmers. The college devise, for which plans and specifications may be secured free of charge upon application to the state experiment station, can be installed for approximately \$25, and is so simple in construction that the average plumber will have no difficulty in manufacturing it. The college also offers to send an expert to install the system if the machine owner will pay his actual expenses, and parts of the system will be made at the college shops and sold at actual cost to the owners of machines, if they desire it.

One advantage of the college system over that of the government appliance is a hose attachment, which may be used for extinguishing fires in the grain or near the machine. The college machine also throws the solution over the outside of the separator, thus extinguishing any flames that may be started on top of the separator through the explosion or otherwise, as well as inside.

Previous to the demonstrations Dr. Ira D. Cardiff, director of the state experiment station, gave an instructive and understandable talk concerning the smut pest in general, outlining the results of experiments conducted on the station farm. Dr. Cardiff attributed the presence of smut in large quantities in the Palouse country largely to its spread during the threshing season, when it blows for great distances and settles on the soil, 25,000 to 30,000 of the smut spores settling on every square inch of surface. Every smut ball contains 3,000,000 of these spores, and as soon as the ball is broken many of the spores are carried away by the wind. In case these spores, which are classified as plants, find no grain from which to draw their food, they die, but if they are brought in contact with grain they soon germinate and the damage is done. As an example of the wide spread of these smut spores, Dr. Cardiff gave the results of observations made on top of Kamiak butte, where 17,000 of the spores to the square inch were found.

Thus it is explained that wheat seeded shortly after harvest time is affected with smut to a much greater degree than that seeded early or late, and Dr. Cardiff strongly advocated early or late seeding as a means of combatting the smut pest, the results of experimentation on the station farm proving the wisdom of his contention.

Deep plowing of summer fallow ground will bury the smut spores to such a depth that but few of them will come in contact with the seed grain, and by this means the smut may be greatly reduced, even though the sowing is done early in the fall, but the early or late sowing is claimed by the station head to be the surer method. Another experiment conducted on the station farm was to scatter straw over half a plot before it was seeded and burn the straw. On the other half of the plot the seeding was done without this precaution. The half on which the straw had been burned, thus killing the germinating power of the smut, shows only one per cent of smut, while the grain on the other half is 25 or 30 per cent smut. This method, however, is somewhat impractical inasmuch as it is more expensive than the other and more practical methods outlined, according to Dr. Cardiff.

A large number of the separator fires are caused by static electricity and Dr. Cardiff urged that wires be connected with the cylinders and grounded, thus providing means of carrying off the static electricity. He also advocated the installation of a blower in the separator, near the cylinder, to keep the smut spores from scattering broadcast.

The necessity of keeping the top and sides of the separator free from dust and smut accumulation was urged by Dr. Cardiff, who stated that the hiring of an extra man to do this work would in most cases prove a good investment.

Dr. Cardiff is a big booster for the fire extinguisher system, and stated that every separator should be equipped with one of the appliances. The machine owner, he said, should use fire precaution for his separator, which is at best a great hazard, in the same ratio as the manufacturing plant or mill, where the possibility of fire is less, but this has not been done in the past.

Spots on towels and hosiery will disappear if a little ammonia is put into the water to soak the articles. Put a teaspoonful into the water in which dishcloths and dish towels are washed and rub a little soap on the towels. Let stand a few minutes, then rub thoroughly, rinse well and your towels will never look gray and dingy.

Save time in washing spoons by keeping old teaspoons in the soda and baking powder cans.

VEGETABLE GROWING PAYING

Good Market and Crop Brings Big Returns on Seventy Acres

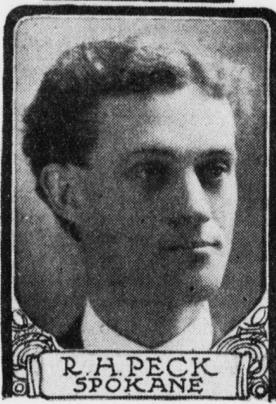
That the Palouse country soil is suitable for more profitable use than wheat growing, even with wheat selling at about a dollar a bushel, is being demonstrated by Homer Hull, living several miles south of Colfax on the Spring flat road, who is this year using most of his land for vegetable growing. Mr. Hull has 70 acres in vegetables, all of which is producing a good crop.

He completed a deal yesterday by which he disposes of 14 acres of cabbages, near 1,000,000 plants, at a cent and a quarter per pound, which is expected to give a net return of several hundred dollars per acre. Other vegetables are being disposed of to local dealers and to commission houses. No trouble has been experienced in finding a market for any of the produce, but on the other hand Mr. Hull is back in his orders, having been unable to fill all of them as they came in. For delivery purposes he is using a small auto made over into a truck.

Because of the large returns, good crop and good market conditions experienced this year he is expecting to continue the venture in vegetables. —Palouiser.

"THE TWO SALVATIONS"

R. H. Peck of Spokane will deliver an address at the Grand theatre next Sunday afternoon, August 13, at 2:15 o'clock on the subject, "The Two Salvations." Mr. Peck comes to Pullman at the request of the local branch of the International Bible Students association, and is a forceful speaker with an unusual



knowledge of the Bible. The address is free to the general public, and the slogan of the Bible association "Admission free and no collection," will be observed.

The address on "Is a Universal Empire Near," by M. O. Field, given last Sunday under the auspices of the same organization, attracted a large attendance to the Grand, and was well received.

CALL FOR BIDS

Sealed bids will be received by the City of Pullman, Washington, for paving in Local Improvement District No. 29, approximately 6400 square yards of bituminous macadam and 420 square yards of vitrified brick, with necessary excavation, gutters and appurtenances, as provided by Ordinance No. 326.

Bids will be received until 7:00 o'clock p. m., August 15, 1916, and opened publicly in the City Hall of said city.

Plans and specifications may be had by addressing the City Clerk and depositing \$5.00 in cash to insure the return of same on or before August 15, 1916.

Each bid must be in the form of proposal furnished, and be accompanied by a certified check on a local bank, payable to the City of Pullman, Washington, for the sum of five (5) per cent of bid, to be forfeited if the successful bidder fails to enter into a contract and furnish a satisfactory bond for the performance of the contract.

The City Council reserves the right to reject any or all bids, as may appear for the best interests of the city.

MATILDA F. GANNON, City Clerk. Aug4-11

FOR SALE—A 14-room house, partly furnished, on Colorado street; furnace and all modern improvements. Would take acreage or city property up to \$2000 as part payment. Apply at this office. jly28sep15

WANTED—Experienced girl or woman to wait on table and help in kitchen. Apply Mrs. Eastman, 505 Colorado. aug11-18

See Duthie for all kinds of lumber. apr24tt

DOWNEN WRITES INSURANCE

HEARD IN PULLMAN

How Bad Backs Have Been Made Strong—Kidney Pills Corrected

All over Pullman you hear it. Doan's Kidney Pills are keeping up the good work. Pullman people are telling about it—telling of bad backs made sound again. You can believe the testimony of your own townspeople. They tell it for the benefit of you who are suffering. If your back aches, if you feel lame, sore and miserable, if the kidneys act too frequently, or passages are painful, scanty and of color, use Doan's Kidney Pills, the remedy that has helped so many of your friends and neighbors. Follow this Pullman citizen's advice and give Doan's a chance to do the same for you.

Mrs. W. Swain, 307 W. Main St., Pullman, says: "A cold, which settled in my kidneys, brought on an attack of kidney trouble three years ago. When sweeping or dusting, sharp pains caught me in the small of my back and nearly drove me frantic. I suffered from headaches and dizzy spells and felt tired to death. I read about Doan's Kidney Pills and used five boxes. They gave me great relief."

Price 50c, at all dealers. Don't simply ask for a kidney remedy—get Doan's Kidney Pills—the same that Mrs. Swain had. Foster-Milburn Co., Props., Buffalo, N. Y.

REGISTRATION NOTICE

The city registration books will close September 1, to be re-opened after the primary election of September 12 and remain open until 20 days prior to the general election. Beginning August 21 the office will be kept open until 9:00 o'clock each evening until the books close for the primaries.

MATILDA F. GANNON, City Clerk. aug4-18

FOR SALE—The quarter section of land one mile west of Pullman, known as the H. M. Aten estate. Terms: \$5000 down, balance on long time to suit purchaser. For information see F. E. Sanger, attorney for the estate. Ella M. Aten, Administratrix. aug5tt

FOR SALE—A Waverly bicycle; used but little and in good condition except the tires. Apply at Herald office. jn30tt

SPECIAL

For 30 days: Jones & Dillingham pure mixed paints at \$2.25 per gallon; best Barn Red, \$1.20.

J. P. DUTHIE.

DRESSMAKING—Now is the time to get your sewing done, before the fall rush. Mrs. M. Tinker, 1711 Opal street. aug4-11

The Herald prints butter wrappers

It makes the wheels go 'round



Fashion and Fancy

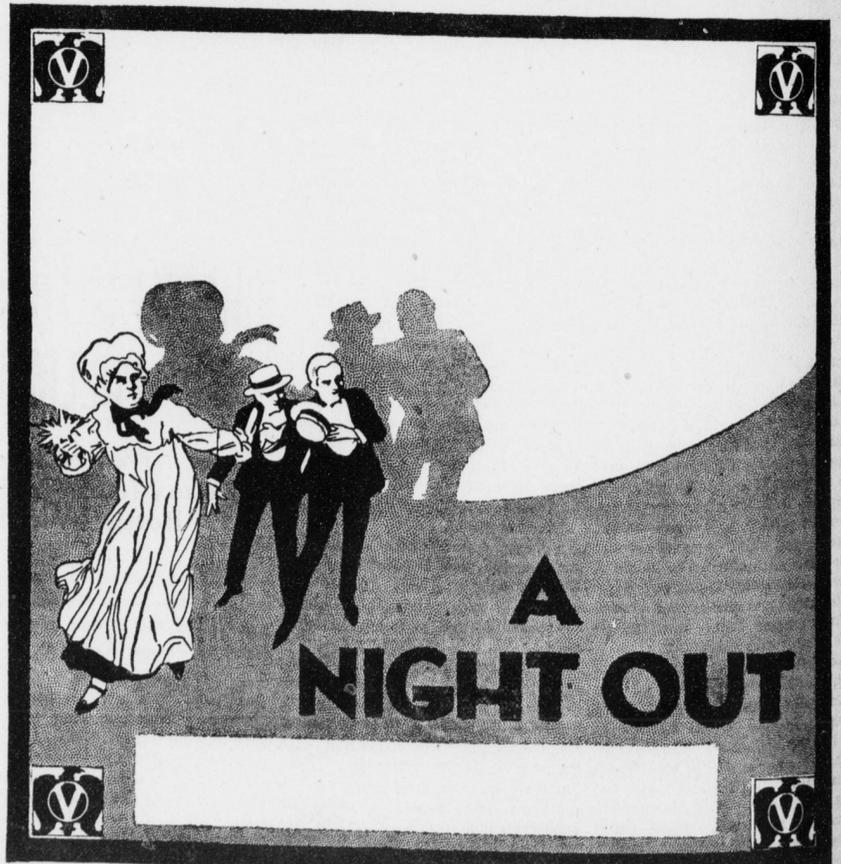
both demand the sports dress and the cool loveliness of the afternoon costume. Nowhere are such models so ably shown as in the



Summer McCall Book of Fashions (NOW ON SALE)

—and nowhere will you find so many hints which can be easily carried out at home. With McCall Patterns the smartest styles can be yours easily and at little expense.

GREENAWALT-FOLGER CO. PULLMAN, WASHINGTON



GRAND THEATRE FRIDAY and SATURDAY
 FRIDAY August 11—May Robson in a Five Reel Comedy "A NIGHT OUT" Selig Athletic Series
 And Frank Daniels in "COL. NUTT'S \$100.00 BILL"
 SATURDAY Matinee and Eve., Virginia Pearson and S. Rankin Drew in "THE HUNTED WOMAN"
 CHARLES CHAPLIN in "THE VAGABOND"
 Third number of the series of 12 comedies released under his \$1,000,000 contract with Mutual Film Corp.
 Matinee—Adults 10c, Children 5c. Evening—Adults 15c, Children 5c