HIGH EXPLOSIVES.

Making Thom Is a Very Delicate and

Complex Process.

Almost all the high explosives have cotton as their base. It is true that very good sporting powder can be made from wood pulp; but, as the editor of Nature remarks, "the artillerist would be in great difficulty if he were provided with such a propellant, because in order to obtain any sort of regularity the nitration of the wood puip has to be kept at a low point, and the ballistics, on which the artillerist

depends, would be quite thrown out."

High explosives are cellulose highly nitrated—that is, highly charged with nitrogen. This process consists of immersing cotton waste (that has been repeatedly teasled, picked and dried) in a mixture of nitric and sulphuric acids, in the proportion of 71 per cent sulphuric acid, 21 per cent nitric acid and 8 per cent water. After the acids have acted for the required time they are removed. The cotton is washed repeatedly and boiled several times in ater. It is then pulped, partly dried

and pressed into molds.

The manufacturer does his best to regulate his output, so that it shall contain approximately eleven molecules of nitrate to the quadruple molecule of cellulose, as shown in the formula, or content of nitrogen that ranges be-

tween 12.93 and 13.05 per cent. The process is delicate and complex, for the proportions of acids and water must be exact and all must be chemically pure. Besides this, the cellulose must be of uniform grade, which is a most difficult thing to obtain.

INDIA'S QUEER BELIEFS.

Buddhists Would Die Rather Than

Lose a Limb or Eat Meat. India's population is 325,000,000. Practically all the races and religions of the world are represented. Ninety-eight and six-tenths per cent of the people cannot read or write. Four per cent of the inhabitants eat regular meals The remainder eat when they can and where they can. The average native in India lives on less food per diem than any other human being in the world. Religious prejudices are in-Men willingly die rather than submit to some dismembering surgical operation, for did not Allah command them to appear before him as they left him to come into the world?

The Buddhists will not eat meat or take even a medicine derived from an animal. They died by millions during the bubonic pingue rather than take a prophylactic serum made from pepsin and beef broth-because the pig from which pepsin was obtained was un-clean to the Mohampedan and Hindu and the killing of this animal and th bull from which the broth was made was against the tenets of the Bud-dhistic faith. I knew an editor in Poona, India, to absolutely refuse \$3,000 yearly advertisement of a patent medicine because it contained pepsin.

Judians are found of sweets and last
year imported over \$40,000,000 worth

of sugar. Clothing is made chiefly from cotton, which is largely grown in the country.-W. E. Aughinbaugh in

When You "See Stars."

The man who when struck violently on the head says he "saw stars" is not far from telling the truth. The fact is that there is a phosphorescent power in the eye which does not attract a person's attention under ordinary conditions, but which is distributed and reveals Itself whenever the head gets n sudden shock and sometimes even in the act of sneezing. A blow on the head results in a pressure of the blood vessels upon the retina, causing either total darkness or a faint blue light which floats before the eyes, and it is in this faint blue light the imagination discerns the thousands of fantastic forms and figures that by general ac while the astronomical display quently mentioned may be said to be entirely a creature of the imagination, there is at least some foundation for

Six Follies of Science.

The six follies of science are the squaring of the circle, perpetual mo-tion, the philosopher's stone, the elixis of life, magic and astrology.

In all ages men of undoubted ability

have tolled early and late to unrave the mysteries supposed to be connect ed with these fascinating problems. I is not always remembered that such intellectual glants as Bacon, Sir Robert Boyle and Sir Isanc Newton sought the philosopher's stone. In the study of astrology Lilly was for a time even

pensioned by parliament.

Most of these "follies" conferred indirect benefits upon science, for in seeking one thing their devotees discovered many another. The craze for the secret, or unknown, has still its hold upon men and is seen in paimis-try and kindred cuits.—Exchange.

Cactuses of Arizona.

Arizona has more than a hundred kinds of cactuses, and Tucson is the center of the great cactus region of the southwest. These odd plants range in size from the noble sabuara, or giant cactus, forty or fifty feet high, to small pincush on cactuses an inch or two in Sahuaras grow in great abunda ice in the foothills between Tuesor and Yuma and are always objects of wonder. It is believed a large plant is at least 200 years old. The fruit legins to ripen in June and is gather d in great quantities by In-dians, who make fine jam and also a pressed sweetment of it.

Why He Laughed.
"What are you laughing at?"
"I was just thinking of my poverty."
"Well, what is there in poverty to

make you laugh?"
"It just struck me that if I should by chance strike it right some day how many thousands there are who could honestly say they knew me when I didn't have a dollar."-Detroit Free

Gem Superstitions.
It is said that the amethyst used to be wern to promote temperance and nobriety, the chrysolite to ward off fe-yers, the onyx worn round the neck to prevent epilepsy, the opal to cure weak eyes and the topaz to cure inflamma-tion and heep the wearer from sleep

Local Advertisements

Livestock Dealer. -- Bert Cartano has ta Success Hangs on the Batter Hit-gauged in the livestock business. He ting the Ball to the Ground. engaged in the livestock business. He is prepared to pay the highest market prices at all times for chickens, bogs, cattle and sheep. If you have stock to sell, the sure and see him.

Beginning December 1, milk will be sold at \$1.35 per pint and \$2.50 per quart. Charles MoFarland.

There is more Catarrh in this section of the country than all other diseases put together, and for years it was supposed to be incurable. Doctors prescribed local remedies, and by constant, yraning to cure with local treatment, pronounced it incurable. Catarrh is a local disease, greatly influenced by constitutional conditions and therefore requires constitutional treatment. Hall's Catarrh Cure, manufactured by F. J. Chency & Co., Toledo, Ohlo, is a constitutional remedy, is taken internally and acts thru the Blood on the Mucous Surfaces of the System. One Hundred Dollars reward is offered for any case that Hall's Catarrh Cure fails to cure. Send for circulars and testimonials.

F. J. CHENEY & CO., Toledo, Ohlo.

F. J. CHENEY & CO., Toledo, Ohio. Sold by Druggists, 75c. Hall's Family Pills for constipation.

Foley's Honey and Tar for children.safe, sure. No opiates.

CROUP & LASH Dentists

In Athena Monday' Tuesday, Wednes-day, other days of week in Walla Walla, 2nd and Main, over Third National Bank Dr. E. W. Croup - Dr. C. H. Lash

E. F. Sharp PHYSICIAN AND SURGEON Special attention given to all calls both night and day. Calls promptly answered. Office on Third

DR. G. S. NEWS M. Physician and Surgeon.

Office in Post Building. Phone, 501

Dr. J. C. Baddeley VETERINARY SURGEON LaBrasche R nch Athena

H. H. HILL Expert Watch Repairing No Job too Difficult. Satisfaction Guaranteed. WESTON, OREGON

D. Scott Fisher Residence and Shop, Adams and 4th Sts. Athena

> L. S. VINCENT Successor to

H. H. HILL Expert Watch Repairer En-

The Original HUMAN BAKE OVEN INC.

grayer and Jeweler

RHEUMATISM and Other Chronic Ailments

Testimonial

I was laid up with Rheumstism from Jan. till June, 1915, and tried every thing imaginable to get relief in vain until I tried the HUMAN BAKE OVEN. My pain was all gone in two weeks and has not returned. I can beartily endorse the treatment. Was Meta

Signed Ubief Walla Walls Fire Dept. Entire top floor DENNEY BLDG., Walla Walla, Wn., Rooms for patients LICENSED PHYSICIAN. Phone 259.

THE SQUEEZE PLAY.

The squeeze play is one of the pretti-est in baseball when successful. When it fails no play makes a ball team look more foolish. The play is best worked with one out, a runner on third and a run needed to either the or win the Many of the best base runners when about to make the play create the impression that there is no inten tion of pulling it by taking only a fair sead off the base and standing still. The very moment the pitcher starts his inovement the man on third tears for the plate.

If in any way the intention to use the pin; is Upped off or foreseen it is an easy matter for the catcher to brenk it up by calling for a waste ball that is so wide of the plate that it is impossible for the batter to bunt it. It is an easy matter to touch the base runner out and make the team trying the squeeze appear ridiculous. But a successful completion of the play usu-ally puts the team in the field in the and makes them look equally fool-

The squeeze play does not call for a hard hitter or a good hitter, but it does call for a man with a good eye, a fellow who invariably hits the ball, even though it may not go safe. If the batsman bunts the ball in the air an easy double play is usually the resuit. If he is able to keep the ball on fair ground there is seldom a chance to stop the run at the plate. It is not necessary to have a fast man on third to make this play, for most of the play depends on the ability of the batsman to keep the ball on the ground.-Billy Evans in St. Nicholas.

Five representatives of the "Men and Millions" Movement, under the direction of the Christian church, with beadquarters at Cincinnati, O. last Sunday evening and several days of the week at the Christian church in this place, and also visited many of the people in the surrounding country. These men are raising six million dollars for educational, missionary and benevolent purposes, over four millions stready having been subscribed. One man gave one million of the awount. They received pledges here for several thousand dollars.

Notice to Creditors.

In the County Court of Umstilla County, State of Oregon.
In the Matter of the Estate of Mattie Phillips, deceased.

Notice is hereby given that the underaigned has been appointed by the above entitled Court administrator of the estate of Mattie Phillips, deceased; and that all persons having claims against the said estate should present them to my attorney, Homer I. Watts, at his office in Athens, Oregon, ver-CONTRACTOR & BUILDER ified as by law required, within 6 mouths from the date of the first publication of this notice, on Oct. 27, 1916. S. T. Phillips,

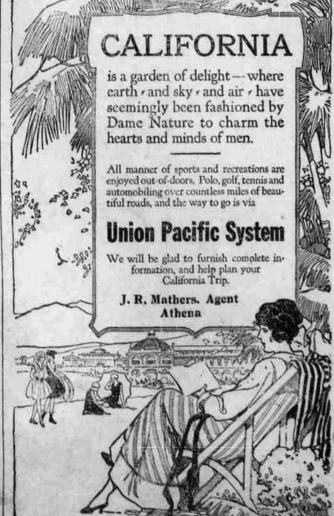
Administrator Notice to Creditors. In the County Court of Umatilla

County, State of Oregon In the Matter of the Estate of Mary Jane Phillips, deceased. Notice is herety given that the un

dersigned has been appointed by the above entitled Court administrator of the estate of Mary Jane Phillips, de ceased; and that all persons baving claims against the said estate should present them to my attorney, Homer I. Watts, at his office in Athena, Oregon, verified as by law required, within 6 months from date of the first pub lication of this notice, on Oct. 27, S. T. Phillips Administrator

Notice to Creditors. In the County Court of Umatilla County, State of Oregon.

In the Matter of the Estate of Alexander Kinnear, deceased: Notice is bereby given that the un dersigned bus been appointed by the above entitled court, Executrix of the estate of Alexander Kinnear, deceased, and that all persons having claims against the said estate should present them to my attorney, Homer I. Watts, at his office in Athena, Oregon, verified as by law required, within 6 months from the date of the first publication of this notice on Non. 24 1916. Margaret Kinnear,



NO HOROGORO DO RORO HORO BORO BOR 23 Years Ago. From the Press of Dec 1 1893]

this place is in a flourishing condition and is rapidly increasing its memtership. One member was initiated last Monday evening and four more will enter Lext Monday.

A large number of friends gathered at the residence of Mr. and Mrs. T. D. Taylor Thursday evening, Nov. 30, to witness the marriage of Mr. W. T. Righy and Miss Equice Smith. The caremony was performed by Rev. G. W. Righy, the father of the groom. The bride looked very handsome in a habiteter colored dress trimmed in beliatrope colored dress trimmed in velvet, and orange blossoms in ber bair. After the ceremony, the guests, about forty in number, were invited to a most excellent marriage supper. During the evening the young people were serenaded by the band.

A quiet wedding took place at the residence of Mrs. Jacobs, on Wednesday evening last, at which Mr. Edgar Dickey was united to Miss Kuts Kees The ceremony was performed by Rev W. C. Gray, pastor of the Methodist church of this city, at an early bour. After the ceremony the guests were invited to a sumptuous marriage supper. There were present: Messrs. Osturn and Sweet, Prof. Story, Mr. and Mrs. Johns, Marion Kees, Miss Annie Kirk and the bride's mother. During the evening the young people were sere-naded by the band.

Thos. Page and family returned Wednesday from a trip to Portland and the Sound. Mr. Page says there is about 800 tons of damaged wheat in Tacoma awaiting shipment to San

Dr. W. T. Williamson, of Salem Grand Master for Oregon of the I. O. O. F. Lodge was in this city on an official visit Friday night last. loctor was formerly a resident of Weston, and for a long time editor of the

"Scribbler's" Notes: The Ameriesn people are fast becoming a nation of gum-chewers. Only a few years ago the habit was confined almost ex-clusively to kids, Chinese and women, while now most any day the lord of creation, with whiskers on his face may be seen standing on the street cor-ners working his jaws like a flax-break, and with an energy worthy of a-tetter cause. What is wanted is a Keeley cure for the gum-chewers. May the day soon come when they will drop

their wax. William Willaty Sr. made a raid or a obtoken roost the other evening and captured a rooster for Thanksgiving. It is needless to add that it was his own henery that was raided.

This is the first year in the history of Umatilla county when a sucking pig was worth as much as a worl Dr. I. N. Richardson is the only

man in town that works on jawbon

for cash. Services at the Christian Church Sunday: Bible school 9:50, G. R. Gerking director; preaching 11 and 7:30. Morning theme, "First Things

First;" evening, "An Old Lesson for Modern Times." Prayer and praise service 7 p. m., Evangelistic meetings during the week conducted by home forces. Dr. W. R. Scott will have charge of the music for the services Everybody cordially invited to come and bring a friend.



The feature of Chesterfields is that they begin where other cigarettes leave off.

In other words, besides pleasing the taste, Chesterfields go further-they satisfyl Just like a long drink of cold water satisfies when you're thirsty.

And yet, Chesterfields are MILD!

It's Chesterfields or nothing if you want this new cigarette delight, because no cigarette maker can copy the Chesterfield blend—an entirely new combination of tobaccos and the biggest discovery in cigarette blending in 20 years.

Liggette Myers Tobacco Co.

"Give me a package of those cigarettes that SATISFY!"



We Are Thankful

-for your sake, because our own prosperity depends on what we do for

youTHAT we have succeeded, as for as we have, in making our business more of A HELP TO YOU; THAT notwithstanding the difficulties of our business, we are more close-

ly atteining the ideal for our mutual benefit. THAT whereas we baudle ony RAW MATERIALS, yet we are now equip-

ped to belp you make such a use of those materials as will contribute to your comfort, health and prosperity THAT we have been able to make ourselves, through our Artchitectural, Engineering, Plan Book and Service departments, an economic necessity

to this community and thus justify our teing here in this business;
THAT we have passed the experimental stage of service and can devote our efforts in the future to being of still GREATER HELP TO YOU IN SOLVING ALL OF YOUR BUILDING PROBLEMS;

THAT we can bring to pass your hopes of a home properly heated, or a BARN or a SILO or ANY AND ALL BUILDNIGS; THAT it is egain "Turkey Time" and we hope that yours will be large, fat, sweet and juicy;

AND WE ARE ESPECALLY THANKFUL THAT WE CAN BE THANK-FUL FOR ALL OF THESE THINGS.

Tum-a-Lum Lumber Company



Brr-r!

Chilly, changeable weather? A good oil heater will keep you warm and cosy. A gallon of Pearl Oilgives 9 hours of smokeless, odorless, cheerful heat. Prices: \$3.75 to \$7.75

Perfection Oil Heater

For Sale by

Foss-Winship Hardware Company



NO COMMISSION NO RED TAPE

NO BONUS NO DELAY LOW INTEREST RATES LIBERAL REPAYMENT PRIVILEGES

Hartman Abstract Company Corner Main and Court Streets, Pendlelon, Oregon

THE FIRST NATIONAL BANK OF ATHENA

Capital and Surplus \$100,000.00

THE ATHENA MEAT MARKET



We carry the best

That Money Buys

Our Market is

Clean and Cool insuring Wholesome Meats.

READ & MEYER Main Street, Athena, Oregon