

COMMERCIAL FERTILIZERS.

Their ingredients, values for particular crops and seasons of application. Usually commercial fertilizers contain two or all of the essential ingredients—nitrogen, phosphoric acid and potash, but sometimes only one. Plain superphosphate contains only phosphoric acid. Ammoniated superphosphate contains nitrogen and phosphoric acid. Bone contains and is valuable for both nitrogen and phosphoric acid. Potash salts are valuable for their potash only. A complete fertilizer is one containing nitrogen, phosphoric acid and potash.

On account of the differences in soils no rule can be given by which to tell what fertilizer is best for any particular crop, and this question must be decided by actual trials systematically and carefully made. Some such trials are being made at the experimental stations, and any farmer who desires to do so can compare the effect of single and complete fertilizers by making trials on his own land.

In regard to the manner of applying fertilizers, says Director M. A. Rowell of the Kentucky station, it is generally best to use broadcast or drill and work well into the soil before planting. When a small quantity of fertilizer is applied to each hill or row at planting time it acts mainly as a stimulant to produce an early and vigorous start, which is considered necessary for the tobacco crop, but often renders it more susceptible to drought. In any case care should be taken to mix the fertilizer with the soil so that it will not come in contact with the seeds or plants. Most fertilizers, and especially those containing much nitrogen, soluble phosphoric acid or potash, will injure or destroy young plants if brought directly in contact with them.

The Beginning of Good Cheese.
In the making of cheese the first thing necessary is good, clean milk, free from animal taint and lardaceous odors. It is impossible to make a fine, clean flavored cheese from impure, tainted milk. The first thing after the milk is placed in the vat is to gradually heat it up to a temperature of 90 degs. Fahr. The heating is accompanied by careful stirring, in order that it may be uniform all through, and also to keep the fat evenly distributed through the mass. When this point is reached the milk should be carefully examined to determine its condition as to ripeness. This may be determined by the expert making of cheese, or, better yet, by the use of the best way is by the use of what is termed the rennet test.

For this each person can fix a rule for himself, and note the time it takes a given quantity of milk to thicken with the use of a certain amount of rennet extract. The rule used by a large number of cheese-makers is eleven ounces of milk, in which is put one cubic centimeter of rennet extract. With this rule, when the milk is of a proper degree of ripeness it should begin to thicken in about two minutes. This test is followed on the well known fact that with the beginning of the development of acidity in the milk the activity of the rennet is increased.—Rural New Yorker.

Pruning Trees.
There are two schools of opposite extremes in regard to pruning. One is not to neglect to cut and slash on every occasion—to use their own motto, "Whenever the pruning knife is sharp, and the other would not cut at all, but leave everything to nature. Moshan, in his illustrated monthly, says that in the management of an apple orchard pruning is essential. All the weak shoots, those which seem to suffer from overbearing or from any other cause, which are not as healthy as others, should be carefully cut out every year, and, moreover, wherever the branches are likely to be thick and struggle with each other for light, they should also be thinned. A perfectly healthy apple tree should be so managed with the pruning knife that every branch should have a fair chance to have the leaves fairly exposed to the light. A large quantity of half shaded and half starved leaves on a tree is not nearly as beneficial as when the tree has a chance for the full development of every leaf—and that is true of the apple orchard, is true in the main of all other trees in the hands of the cultivator. When we come to forestry culture it is impossible to do without pruning if we would have first class timber.

Spraying During 1905.
The experience of 1905 emphasizes the necessity of spraying for fruit berries and even vegetables. Spraying is as imperative as good manuring and good cultivation, says the Philadelphia Farm Journal, which gives these figures: "During 1905 sulphate of copper (bluestone) could be bought in Philadelphia for 45 cents a pound; carbonate of copper, 50 cents a pound; arsenic, 10 cents a pound; flowers of sulphur, 5 cents a pound; live of sulphur, 20 cents a pound; paris green, 15 cents a pound, and white lime, 20 cents a pound. Under these quotations for sulphate of copper, carbonate of copper and arsenic it is easy to calculate the respective cost of Bordeaux mixture and ammoniacal carbonate of copper—the two leading fungicides in general use. The former would cost about three-quarters of a cent per gallon and the latter about one cent per gallon. They are supposed to be about equally effective, but the latter does not spot the fruit or foliage."

Farm Items.
S. D. Willard reminds readers that young trees heavily manured with stable manure are inclined to grow wood rather than fruit. They will not come into bearing as soon as those not so treated. Good comb honey will be scarce. Even California fails to roll in her usual supply to the eastern market. From nearly all sections come the mournful declaration, "It has been a poor year." In a corn husking contest in Australia the winner husked 300 ears in 30 minutes and 10 seconds. The dairy school of the Georgia experiment station is reported to be a success.

Long Winded Fables.
"The Scythians," said Sydney Smith, "are the grandest men when they become troublesome and tell long stories." Who knows whether the Scythians may not suffer a remnant of these useful Scythians to survive even unto our day to be a terror to long winded fables, male and female? I met at dinner recently an old fogy who I am sure has his Scythian walking

for him. He had been harrying the company with stupid remarks about national history, asking questions, and that would turn the stomach of a school inspector. At length, in that peculiar tone of voice in which theological questions are uttered, he said, "Has an expert leader?" "Certainly," replied our host, "for an expert knows when to shut up."—Temple Bar.

Getting a "Snop."
I remember being a war correspondent, one of a dozen paper at the battle of Bull Run. Bullets were flying thick as hailstones, and shells were cracking as though pandemonium had broken loose, but the company, who kept screaming around in the thick of it all, nobody in hand. Our major leaped out to him, "Lie down, you fool—you'll be killed." "May be so," he replied, "but I'm getting a 'snop'—a little thing like getting killed doesn't worry your thoroughbred ones gather when there's a 'snop' in sight.—Interview in St. Louis Globe-Democrat.

Irish Spies and Informers.
The recorded enmities of these Irish informers were enormous. As to their indirect profits it would be idle to speculate. One Bernadine, a spy of very secondary importance, received on March 4, 1796, a sum of £5,000 from the secret service money, and was further gratified with a secret pension of some thousands a year. He afterward obtained the office of British postmaster at Limerick, the emoluments of which amounted during his four years of service to nearly £6,000. He was subsequently appointed to more than one well paid commission, and at length, retiring in middle life from the public service of his country, he came Paris as his final place of abode, and enjoyed his pension to the day of his death, having drawn from the exchequer of a British government less than £100,000.

Armstrong is said to have received close on £10,000 for his information; and Magan, who took up the business as a news vendor, took over £14,000 to his sister. Haggin, who was not even an informer at first hand, but a species of information agent or spy keeper, began life as a paper and a "chain squint," and after many years of free and easy living in Dublin, maintaining a reputation for that liberal hospitality so necessary to his success in his profession, died worth no less than £40,000. Few of the real spies or peeps of Ireland for the matter of that who led such a considerable sum of money behind them in the early days of the present century.—Edinburgh Review.

What Chef to Feasting Men.
The chef, from what is one of the best materials for use on the floor of the poultry house. It is not only permits of easy cleaning of the house, and acts as an absorbent and sink into a litter in which hens may scratch for food. It is unwise to feed whole grain from troughs. The use of cut straw, hay or leaves as litter in which the grain may be thrown, and which will be eaten by the hens in the food. If eggs are desired the exercise from scratching will keep the hens in the best condition to provide them.—Orange County Farmer.

Information Wanted.
"Do birds think?" asks a writer in exposing an article. If they do, we should like to know what a canny thinks of a woman who stands up on a chair and talks baby through the bars of the cage.—New York Recorder.

Don't You Never Can Be Serious.
Dumb-brown—I should like to feel when I die I leave the world better than I found it.

Japanese Liver Pellets.
This medicine is the most powerful and reliable remedy for all liver troubles, such as indigestion, constipation, biliousness, etc. It is a perfect cure for all these ailments, and is sold in all drug stores.

CONWAY CABINET CO'S HARDWOOD MANTELS.
THE BEST IN THE WORLD.
WATSON BROS., Corner South and West, Salt Lake City, UTAH.
AGENTS FOR UTAH.

BEST OAK TANNED Leather Belting.
A. O. COOK & SON,
418 Market St., SAN FRANCISCO, CAL.
J. F. C. M. L.

COBURN'S PURE OLIVE OIL.
First pressing guaranteed. Perfectly Pure.
COBURN, TEVIS & CO.,
Agents, San Francisco.

TUBBS CORDAGE COMPANY,
MANUFACTURERS OF ALL KINDS OF MANILA AND SISAL ROPE.
RIVERSIDE, CALIF. 911 & 913 Front St.,
SALT LAKE CITY, UTAH.
J. G. Gaudin, Resident Agent.

PATENTS.
G. A. SNOW & CO.
C. P. PATENT OFFICE, WASHINGTON, D. C.

NERVOUS DEBILITY.

DR. GUNN'S ONION SYRUP FOR COUGHS, COLDS AND CROUP. GRANDMOTHER'S ADVICE.

"The Pace That Kills"
is overwork—makes no difference what kind. Using greasy and inferior soaps is one road to premature decay—sore hands—sore hearts—clothes never clean. Not so when

KIRK'S AMERICAN FAMILY SOAP
is used. Cheerfully proceeds the labor of wash-day with health and long life assured. Hands all right—bright light—clothes pure and white as a Greenland snowdrift.

Star Horse Nails.
Polished or Blued.
Here have sold by E. C. M. L. for over 15 years. They are the BEST NAILS MADE, and guaranteed to give the best of satisfaction. Will hold a shoe on longer than any other.

UNION HORSE NAIL CO.,
Chicago, Ill.
For sale by E. C. M. L. and branch stores.

GUNPOWDER.
Admission "Ketchikan Hills."
Admission "Trap Shooting."
Admission "Hunting and Shooting."
Admission "Hunting and Shooting."

THE HAZARD POWDER COMPANY,
Hazardville, Conn.
Represented by Paine & Lyne, Agents.

OMAHA WOOL BAGS.
BURLAP BAGS.

CONWAY CABINET CO'S HARDWOOD MANTELS.
THE BEST IN THE WORLD.

BEST OAK TANNED Leather Belting.
A. O. COOK & SON,
418 Market St., SAN FRANCISCO, CAL.

COBURN'S PURE OLIVE OIL.
First pressing guaranteed. Perfectly Pure.

TUBBS CORDAGE COMPANY,
MANUFACTURERS OF ALL KINDS OF MANILA AND SISAL ROPE.

PATENTS.
G. A. SNOW & CO.
C. P. PATENT OFFICE, WASHINGTON, D. C.

UNION PACIFIC SYSTEM.
THE THROUGH CAR LINE.
EFFECTIVE FEB. 1st, 1906.
Trains arrive and depart at Salt Lake City daily, as follows:

ARRIVE.
From St. Paul, Portland and San Francisco... 10:00 a.m.
From Salt Lake City and Reno... 10:30 a.m.
From Salt Lake City and Reno... 11:00 a.m.
From Salt Lake City and Reno... 11:30 a.m.
From Salt Lake City and Reno... 12:00 p.m.

RIO GRANDE WESTERN.
Standard Gauge.
CURRENT TIME TABLE
In Effect Jan. 1st, 1906.

CALIFORNIA BREWERY.
LAGER BEER, ALE AND PORTER.
Wholesale and Retail.
101 N. 2nd St., SALT LAKE CITY.

UNION HORSE NAIL CO.,
Chicago, Ill.
For sale by E. C. M. L. and branch stores.

GUNPOWDER.
Admission "Ketchikan Hills."
Admission "Trap Shooting."
Admission "Hunting and Shooting."
Admission "Hunting and Shooting."

THE HAZARD POWDER COMPANY,
Hazardville, Conn.
Represented by Paine & Lyne, Agents.

OMAHA WOOL BAGS.
BURLAP BAGS.

CONWAY CABINET CO'S HARDWOOD MANTELS.
THE BEST IN THE WORLD.

BEST OAK TANNED Leather Belting.
A. O. COOK & SON,
418 Market St., SAN FRANCISCO, CAL.

COBURN'S PURE OLIVE OIL.
First pressing guaranteed. Perfectly Pure.

PATENTS.
G. A. SNOW & CO.
C. P. PATENT OFFICE, WASHINGTON, D. C.

"Scenic Line of the World."
THE DENVER AND RIO GRANDE RAILROAD.
PASSING THROUGH SALT LAKE CITY.
En Route to and from the Pacific Coast.

THE POPULAR LINE TO Leadville, Glenwood Springs, Aspen and GRAND JUNCTION.
THE MOST DIRECT ROUTE TO Trinidad, Santa Fe & New Mexico Points.
THE TOURIST'S FAVORITE LINE TO ALL MOUNTAIN RESORTS.

Deseret News Company PIONEER Bookbindery OF THE WEST.
ESTABLISHED 1880.
Bookbinding and Paper Ruling
IN ALL ITS BRANCHES.

ABSTRACTS, COUNTY WORK, BLANK BOOKS, COUNTY BLANKS.
PLACES FURNISHED OR AFFILIATION.
"ANY" TAR BOARD and Best Trade of Materials Used to make our work durable.

UNION HORSE NAIL CO.,
Chicago, Ill.
For sale by E. C. M. L. and branch stores.

GUNPOWDER.
Admission "Ketchikan Hills."
Admission "Trap Shooting."
Admission "Hunting and Shooting."
Admission "Hunting and Shooting."

THE HAZARD POWDER COMPANY,
Hazardville, Conn.
Represented by Paine & Lyne, Agents.

OMAHA WOOL BAGS.
BURLAP BAGS.

CONWAY CABINET CO'S HARDWOOD MANTELS.
THE BEST IN THE WORLD.

BEST OAK TANNED Leather Belting.
A. O. COOK & SON,
418 Market St., SAN FRANCISCO, CAL.

COBURN'S PURE OLIVE OIL.
First pressing guaranteed. Perfectly Pure.

PATENTS.
G. A. SNOW & CO.
C. P. PATENT OFFICE, WASHINGTON, D. C.

SHOES.
The well dressed ladies of Salt Lake will be delighted with the prices which we offer for two weeks in our Shoe Department.

A. J. Johnson & Co.'s \$3.00 Kid Reduced to \$2.50.
A. J. Johnson & Co.'s Kid Goodyer Welt Turns for \$3.25.
E. P. Reed & Co.'s \$3.25 Kid and Coat Shoes at \$2.50.
Pingree & Smith's All Styles and Qualities 25 per cent off.
200 Pair Ladies' and Children's Different Manufacturers, at One-half Regular Price.

These Makes of Shoes are too well known for their STYLISH APPEARANCE, COMFORT AND DURABILITY TO BE QUESTIONED.

TEASDEL'S WOOLLEY STEAM LAUNDRY.
Laundry Work in all its Branches.
Telephone No. 116. Location, 1st North Ninth East. Also with Bakers & Co., 42 1/2 West Street.

Sportsmen's Headquarters! BROWNING'S BROS.,
165 S. Main St., Salt Lake City, Utah. 2461 Washington Ave., Ogden, Utah.
Shot Guns, Rifles, Pistols, Ammunition and a general line of Fishing, Sporting and Athletic Goods.

LITTLE ANNIE ROONIE (DON'T TAKE HER FOR A LOONIE) TOLD HER SWEETHEART, A CHARTER OAK STOVE WITH A WIRE GAUZE DOOR MUST BE MY LEGACY BEFORE WE WED-OR WE MUST PART.

FASHIONABLE AND HEALTHFUL THE GENUINE Jackson Corset Waist.
SUPERB FORM. PERFECT FIT.
A perfect Corset and Waist combined. Fashion for its style, graceful symmetry, and beautiful qualities. Guaranteed Feb. 25, 1906. One pair sent on each trial. Take no other. Made only by the JACKSON CORSET CO., Jackson, Mich. IF YOUR DEALER HASN'T IT, WRITE TO US.

FREE DR. JUDD'S ELECTRIC BELT.
Prices, \$5, \$10 and \$15, as warranted. Also Electric Trusses and Box Bristles. Cash nothing to try them. Can be regulated in suit, and guaranteed to last for years. A full and battery combined, and picture outfit. Electricity to shock. Free Medical advice. Write today. Give waist measure, price and full particulars. Agents wanted. Address: DR. JUDD, Detroit, Mich.

POPULAR Buckle & Son TAILORS.
Established May, 1876.
Punctuality, Fashion, Economy.
Agents Deseret Woolen Mills.
S. E. Baque Suite to Order, \$25.00.