RATION THAT IS BEST FOR THE DAIRY COW

Common Mistake Made in Corn Belt Is to Feed Too Much Corn—By C. H. Eckles, Professor of Dairying, Missouri Agricultural College.

The ordinary pasture grasses, especially blue grass, when in the growing state, contain the proper proportion of nutrients to enable a dairy cow to produce the maximum amount of milk of which she is capable. The winter ration, on the other hand, is liable to have these nutrients out of proportion. This is one point where in common practice fails far short of continuing the summer conditions throughout the winter. The feeding of a ration not properly balanced is one of the most common mistakes made on the average farm in the corn belt on account of the usual abundance and cheapness of corn and corn fodder.

Many farmers have corn fodder and timothy hay for roughness and practically nothing in the way of grain but corn. From such a selection of feeds it is impossible to make a ration that supplies the necessary nutrients for heavy production of milk. It is possible to make a fairly good ration using these feeds for roughness, but it is only possible to do so by buying large quantities of mill feeds that are rich in protein. The thing for the farmer to do is to raise the feeds he requires on his own farm, as far as possible, and it is possible to produce practically all that is needed to make a balanced ration. The place to begin in considering the feeding of an animal is always with the roughness, since the character of the roughness determines to a large extent the kind of grain it is advisable to feed.

Johanna, Holstein, Wonderful Wisconsin Cow—Production for Year 1907-8, 13,186.2 Pounds of Milk, 477.96 Pounds of Fat (Average Per Cent. 3.62); Net Profit, $95.31.

The cheapest source of protein is in leguminous hays, including clover, alfalfa and cow pea. If an abundant supply of any one of these hays is on hand, the problem of making an economical balanced ration is very much simplified. The use of these hays makes it unnecessary to buy any cottonseed meal for ordinary dairy cows, and makes it possible that the principal grain used be corn, which usually is our cheapest grain. Even cow pea or alfalfa hay alone, with corn for grain, makes a fairly good ration for an ordinary dairy cow, and such a ration could be substituted with good results for that of timothy hay and corn fodder. When hay is purchased, it is always best to purchase one of the kinds mentioned, as the price is about the same, or lower than that of timothy, which is far inferior as a milk producing food. If any hay is to be sold from the farm it should be timothy hay and not clover or cow pea hay.

The third summer condition, which we desire to continue throughout the winter, is that of a supply of succulent feed. By the term succulent feed is meant feed having that property possessed by green grass. Such feed has a value outside of the actual nutrients it contains on account of its favorable effect upon the digestion of the animal. There are two methods in use for supplying this succulent feed during the winter season. One is the use of root crops and the other the use of silage. In some parts of the world the use of root crops is almost universal, and is the solution of the problem. In this state the use of silage is far more practical, however, than the use of root crops, and for that reason it is recommended exclusively for this purpose.

The following rations supply the necessary material to produce milk economically. If the cow will not give a good flow of milk in the early part of the milking period and when fed a liberal amount of one of these rations it indicates she is not adapted by nature to be used as a dairy cow and should be disposed of. The amounts given are considered about right for the cow giving from 20 to 25 pounds of milk a day. For heavy milking cows these rations would have to be increased, especially in the grain, and for light milking cows the grain should be decreased. In making up these rations it is designed that the cow be given all the roughness she will eat and sufficient amount of grain to furnish the proper amount of digestible material. It is not designed that these rations should be sufficient or best adapted for cows that are being fed for making records, for which a very maximum production is desired regardless of expense.

Some Good Dairy Rations.

	Pounds
Clover hay	26
Corn	5 to 6
Bran or oats	3 to 5
Clover hay	20
Corn and cob meal	6 to 9
Gluten or cottonseed meal	2
Alfalfa or cow pea hay	10
Corn fodder	25
Silage	7 to 9
Bran	2
Alfalfa or cow pea hay	15 to 20
Corn	8 to 10
Corn silage	10
Clover hay	12
Corn	4
Bran	2
Corn silage	20
Alfalfa or cow pea hay	15
Corn	8 to 10

FEEDS, SEEDS AND WEEDS

A Danger to the Farm—By E. H. Jenkins, Director Connecticut Experiment Station.

There are a number of mixtures sold as feeds which contain large quantities of seeds of undesirable and pestilent weeds of which a considerable portion are alive and will, under proper conditions, promptly germinate and grow.

The weed seeds are not always quickly detected by casual inspection, because they are variously mixed with chaff and oat hulls, with linseed, barley and corn products and are often mixed or smeared with molasses.

These facts are naturally not mentioned in the statements of composition, yet they are more important to the buyer than the chemical analysis.

A moderate food value may be granted to ground weed seeds, or to some species of them, but it is very doubtful if small whole seeds are broken up and digested by the animal.

It has been proved that fermenting manure kills many weed seeds when they are kept in it for some time, but common experience fully justifies the belief that the farm may be stocked with weeds which com along with the manure.

Weed seeds which are scattered abundantly wherever feed and feed residues are scattered, will surely make their appearance in the fields. Thus charlock appeared last year quite abundantly on the station land, where it had not been seen for 26 years at least. On searching for the cause, it appeared that the junkos or snowbirds had been fed with wheat screenings on a flat roof in the neighborhood during a severe winter and the charlock seeds in the screenings had no doubt been blown from the roof to the lawn.

Certain manufacturers claim to destroy the vitality of the weeds which they mix with feed, but in no one of those above reported has even this measure of protection to the purchaser been thoroughly done. Ih has been recently attempted only in case of the sucrene feeds.

All of these weeds are characteristic of grain screenings which are the refuse separated from grain, in order to make the latter marketable or fit for milling. These screenings vary a good deal in quality. Thus an analysis recently made here of wheat screenings showed about 23 per cent. of flax and shrunken cereal, 8 per cent. of foxtails, 8 per cent. of blindweeds and pigweeds, 15 per cent. of weed seeds of other species and 21 per cent. of dust, broken seed and sand. Even such a mixture is much better than many others which often contain very little, if any, wheat or flax.

An average price for screenings is $12 a ton in Chicago or $16 in Cincinnati.

Mixed with molasses and chaff or hulls, and in some cases with really good feed materials, some of them sell at prices which are nearly as high as those paid for first-class feeds.

Made in considerable part of inferior materials and charged with weed seeds, they are dangerous on the farm.

GROUND OATS BEST.

Make an Excellent Feed for the Laying Hens.

Some poultrymen feed ground corn and oats, and, together with vegetables, make a mash for the poultry. Where ever ground oats can be procured without the corn being mixed with it, the feed will be much better when the corn is in excess. Some millers in grinding corn and oats add more corn than oats, depending upon the comparative price of the two. For other stock, or for milk cows, such a food may be better, but not for fowls. If it can be done it is always better to have the oats and corn ground separately and mix the two in quantities and proportions to suit the requirements of the particular flock, as fowls should not all be fed alike. Some farmers have the habit of feeding fowls whole oats, and we have seen a great many oats wasted in this method of feeding. Oats consist of a hard husk which fowls dislike, says the Kansas Farmer, and much more good will be obtained from them if the oats are ground. In all events, plenty of grit should be supplied so the fowls may finish the grinding.

Feed at Noontime.—Noontime is the best time to feed raw vegetable foods like cabbages, beets and turnips.

WELL PLEASED WITH WESTERN CANADA.

GOOD CROPS, SPLENDID CLIMATE AND WELL ENFORCED LAWS.

Mr. George E. Hunter is a Maidstone, Saskatchewan (Central Canada), farmer, who writes to a Canadian Government Agent as follows:

"It was the first week in November, 1907, when we arrived here. There was very little snow or cold weather until after the holidays, then the snow and cold increased, but to no great extent. I think the coldest I heard of was 30 degrees below zero, but that degree of cold would not be felt here any more than 10 degrees below zero would be back home in Michigan, owing to the beautiful dry atmosphere of this country. There came a good thaw every month that settled the snow, the fields soon became bare, and on the 12th of April I commenced ploughing. The snow was then all gone and summer at hand. This last season was something more than an average year around here, with fine crops gathered from a large acreage. In parts the crops were less than average, but generally speaking they were above it. The price of wheat was quite good. Some fine yields sold at $1.10 per bushel, while some were marketed at much less, but hardly any went below about 60 cents a bushel.

"Oats started on the market at 35 cents a bushel, barley about 50 cents, and flax from 90 cents to $1.00 a bushel.

"As this was my first year in this country, it was a hard year for my horses, owing to their being eastern horses, and not used to the western climate, but they will soon get climatized.

"The soil on my farm is a black loam, about one foot in thickness, below that we find about six feet of clay, and below that again gravel and sand, with an abundance of excellent water. This was the condition of the ground as I found it when I dig a well. I can say that the water is as sweet and as free from alkali and impurities as I ever saw.

"My opinion is that the man who comes here with a little means can do no better than invest $500 or $1,000 in cattle, after locating a homestead adjoining or near some hilly part of the country where it will not be taken up as soon. There is plenty of grass and hay to be found in the hilly country and small lakes and sloughs will afford sufficient water for any amount of cattle. The bluffs with a few hay or straw sheds will make sufficient shelter for them. There is no need to worry about the market for cattle, as there is already a great call for stock of all kinds to satisfy the continued demands of the large packing house at Edmonton, established by Swift and Company.

"The dairy business should by no means be forgotten. It is one of the paying enterprises of this great west. The price of butter seldom goes below 25 cents, and reaches as high as 40 cents a pound. Also the new creameries that are fast being erected along the lines of railroad are calling on the farmers for their cream.

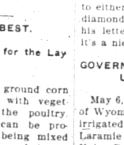
"These creameries are greatly welcomed in all communities, because selling cream is better than making butter, as even at an average price of 25 cents a pound. For a new country the railroad transportation facilities are good; not yet, of course, what they are in older countries, but the new lines are swiftly gaining as the country gets settled and supplies them with produce to ship. It is hard to say too much in favor of this country. All one needs is a little money with grit and ambition. I have seen homesteads that were filed on a little over three years ago that the owners have refused $3,000 for.

"There is much more that can be said in favor of Western Canada, but I think my letter has been long enough."

HERE'S A NEAT LITTLE PUZZLE.

Seems Simple, But Will Occupy You for a Few Minutes.

The Paris Temps publishes this story: "While in the Orient a Frenchman bought a diamond studded cross, which he sent to his wife in Paris. To guard against possible theft he notified her that counting from the bottom to the top there were seven diamonds, and counting from the bottom to the end of each branch there were also seven diamonds, thus:



"When he returned home he found that two diamonds had been stolen from the cross, but that from top to bottom the number was still seven, and that counting from the bottom up to either branch there were still seven diamonds, as designated by him in his letter of warning. Figure it out, it's a nice little puzzle."

GOVERNMENT LAND OPENING UNDER CAREY ACT.

May 6, the State Land Commissioner of Wyoming will distribute 7,000 acres irrigated land at Cooper Lake, near Laramie and Denver, on main line of Union Pacific; 50 cents per acre. Oldest Reservoir and Direct Water Rights, $5 an acre cash and $3 an acre annually for ten years. Free trip and two town lots to all who apply before May 1. Write for application and circulars. Tallmadge-Buntin Land Co., Agents, 2nd Floor Railway Exchange, Chicago. Agents wanted.

Thoughtful Child.

They are considerate youngsters in England, as most people know. A little boy whose grandmother had just died wrote the following letter, which he duly posted: "Dear Angels: We have sent you grandma. Please give her a harp to play, as she is short-winded and can't blow a trumpet."—London Tit-Bits.

PISO'S CURE
CURES WHERE ALL ELSE FAILS.
Best Cough Syrup. Tastes Good. Use in time. Sold by druggists.
CURE

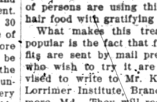
IS BALDNESS DOOMED?

Baltimore Specialist Says It Is Unnecessary, and Proves It.

Baltimore, Feb. 21.—The intense interest in the wonderful work that is being accomplished in Baltimore and other cities by Wm. Chas. Keene, president of the Lorrimer Institute, continues unabated. Many cases of baldness and faded hair of years' standing have been remedied by the remarkable preparation being distributed from Mr. Keene's laboratory, and its fame is spreading far and wide and thousands of persons are using this remarkable hair food with gratifying results.

What makes this treatment more popular is the fact that free trial outfits are sent by mail prepaid. Those who wish to try it are strongly advised to write to Mr. Keene at the Lorrimer Institute, Branch 240, Baltimore, Md. They will receive the full trial outfit free of charge and much useful information about the hair which will put them on the road to a rapid and certain improvement.

THE VERY LAST.



"I'm so delighted to see you, major. I thought you had died."

"Died, madam? That's the last thing I'd do, madam."

Important to Mothers.

Examine carefully every bottle of CASTORIA a safe and sure remedy for Infants and children, and see that it

Bears the Signature of *Chas. H. Fletcher*

In Use For Over 30 Years.
The Kind You Have Always Bought.

Invention of Porcelain.

At a display of porcelain in China an exhibitor said that Chinese literature ascribes the invention of porcelain to a period some 25 centuries before Christ. Foreign experts are by no means certain that the art existed before the seventh century of this era.

This Will Interest Mothers.

Mother Gray's Sweet Powders for Children, used by Mother Gray, a nurse in Children's Home, New York, cure Constipation, Feverishness, Teething Disorders, Stomach Troubles and Destroy Worms. 30,000 testimonials of cures. All druggists, 25c. Sample FREE. Address Allen S. Olmsted, Le Roy, N. Y.

Hands Up!

Winks—Were you ever in a railroad holdup?

Blinks (seasoned traveler)—Yes; I always go standard Pullman.

A Cough, if neglected, often affects the Lungs. Brown's Bronchial Troches give relief. 25 cents a box. Samples sent free by John I. Brown & Son, Boston, Mass.

It makes a woman awfully tired to see a man make a fool of himself over any other woman.

ONLY ONE "BROMO QUININE"

That is LAXATIVE BROMO QUININE. Look for the signature of E. W. GROVE. Used the World over to Cure a Cold in One Day. 25c.

Why doesn't some enterprising attorney write a book of unwritten laws?

Allen's Foot-Ease, a Powder

For swollen, sweating feet. Gives instant relief. The original powder for the feet. 25c at all Druggists.

The common people believe without proof.—Tacitus.

Mrs. Winslow's Soothing Syrup

For children teething, softens the gums, reduces inflammation, allays pain, cures wind colic. 25c a bottle.

Some men have no excuse for being sober when the lid is off.

HOME TONIC FOR OLD PEOPLE

Wonderful results, eventually restoring full physical vigor, are obtained from the following: To one-half pint good whiskey, add one ounce syrup sarsparilla and one ounce Toris compound, which can be procured from any druggist. Take in teaspoonful doses before each meal and before retiring.

Poor Pat.

The surgeon of a large hospital was paying a visit to the patients when he come to a cot whereon lay an Irishman who was not bearing his pain very bravely, for he was groaning loudly.

"Oh, come, my poor fellow," remonstrated the surgeon, "try and bear your pain like a man. It's no use kicking against Fate."

"Shure, you're roight, sorr," groaned the Irishman, "who had been severely kicked by a mule, "especially whin they're the fate of a mule!"—Exchange.

A Republican Reliance.

Three-year-old Norris is fond of the Twenty-third Psalm, sometimes repeating it instead of his regular evening prayer. Last autumn the name of the successful presidential candidate was often heard at the dinner table, and Norris unconsciously fell into the habit of rendering one passage of the Psalm in this reassuring fashion: "Thy rod and thy Taft they comfort me."—Lippincott's.

Catarrh Cannot Be Cured

with LOCAL APPLICATIONS, as they cannot reach the seat of the disease. Catarrh is a blood or constitutional disease, and in order to cure it you must take internal remedies. Hall's Catarrh Cure is taken internally, and acts directly upon the blood and mucous surfaces. Hall's Catarrh Cure is not a quack medicine. It was prescribed by one of the best physicians in the country for years and is a regular prescription. It is composed of the best tonics known, combined with the best blood purifiers, acting directly on the mucous surfaces. The perfect combination of the two ingredients is what produces such wonderful results in curing catarrh. Send for testimonials, free.

F. J. CHENEY & CO., Prop., Toledo, O.

Sold by Druggists, price 75c.

Take Hall's Family Pills for constipation.

Not Worth Bothering With.

Patient—Doctor, I've got a pain covering a spot just about as large as a half dollar I should say, right under my left shoulder blade.

Doctor—Humph! If the pain area is no larger than that it isn't worth bothering with. Wait until it gets about the size of a two-dollar bill, then come around and see me.—Illustrated Sunday Magazine.

To Save Time.

A small machine glass with markings indicating different numbers of drops will be found a great saving of time to every mother, while the accuracy of measurements by means of it is well worth taking into consideration.

Stiff neck. Doesn't amount to much, but mighty disagreeable. You've no idea how quickly a little Hamlins Wizard Oil will lubricate the cords and make you comfortable again.

As we grow older it is very comforting to assure ourselves that wrinkles are merely the dimples of second schildhood.

Red, Weak, Weary, Watery Eyes

Relieved by Murine Eye Remedy. Compounded by Experienced Physicians. Conforms to Pure Food and Drug Laws. Murine Doesn't Smart; Soothes Eye Pain. Try Murine in Your Eyes. At Druggists.

It's a good thing to have opinions—and it's a better thing to keep the lid on them sometimes.

No harmful drugs in Garfield Tea. Nature's laxative—it is composed wholly of clean, sweet, health-giving Herbs. For constipation, liver and kidney troubles.

What you call temper in your wife you call temperament in yourself.

PILES CURED IN 6 TO 14 DAYS.

PAZO OINTMENT is guaranteed to cure any case of Itching, Blind, Bleeding or Protruding Piles in 6 to 14 days or money is refunded. 50c.

A woman probably feels blue when she is green with envy.

Facts for Sick Women

We know of no other medicine which has been so successful in relieving the suffering of women, or secured so many genuine testimonials, as has Lydia E. Pinkham's Vegetable Compound.

In almost every community you will find women who have been restored to health by Lydia E. Pinkham's Vegetable Compound. Almost every woman you meet has either been benefited by it, or knows some one who has.

In the Pinkham Laboratory at Lynn, Mass., are files containing over one million one hundred thousand letters from women seeking health, in which many openly state over their own signatures that they have regained their health by taking Lydia E. Pinkham's Vegetable Compound.

Lydia E. Pinkham's Vegetable Compound has saved many women from surgical operations.

Lydia E. Pinkham's Vegetable Compound is made exclusively from roots and herbs, and is perfectly harmless.

The reason why it is so successful is because it contains ingredients which act directly upon the female organism, restoring it to healthy and normal activity.

Thousands of unsolicited and genuine testimonials such as the following prove the efficiency of this simple remedy.

Minneapolis, Minn.:—"I was a great sufferer from female troubles which caused a weakness and broken down condition of the system. I read so much of what Lydia E. Pinkham's Vegetable Compound had done for other sufferers women, I felt sure it would help me, and I must say it did help me wonderfully. Within three months I was a perfectly well woman.

"I want this letter made public to show the benefits to be derived from Lydia E. Pinkham's Vegetable Compound."—Mrs. John G. Moldan, 2115 Second St. North, Minneapolis, Minn.

Women who are suffering from those distressing ills peculiar to their sex should not lose sight of these facts or doubt the ability of Lydia E. Pinkham's Vegetable Compound to restore their health.

For **DISTEMPER** Pink Eye, Epizootic Shipping Fever & Catarrhal Fever

SPOHN'S DISTEMPER CURE

Sure cure and positive preventive, no matter how horses may have been exposed or exposed. Liquid, given on the tongue, acts on the Blood and Glands, expels the poisonous germs from the body. Cures Distemper in Dogs and Sheep and Kittens in Poultry. Largest selling live stock remedy. Cures La Grippe among human beings and is a fine Kidney remedy. 50c and $1 a bottle, $5 and $10 a dozen. Cultivated. Keep it. Show to your druggist, who will get it for you. Free Booklet, "Distemper, Causes and Cures." Special agents wanted.

SPOHN MEDICAL CO., Chemists and Bacteriologists GOSHEN, IND., U. S. A.

COLDS

CURED IN ONE DAY

Munyon's Cold Remedy Relieves the head, throat and lungs almost immediately. Checks Fevers, stops Discharges of the nose, takes away all aches and pains caused by colds. It cures Grip and obstinate Coughs and prevents Pneumonia. Price 25c.

Have you stiff or swollen joints, no matter how chronic? Ask your druggist for Munyon's Rheumatism Remedy and see how quickly you will be cured.

If you have any kidney or bladder trouble get Munyon's Kidney Remedy.

Prof. Munyon has just issued a Magazine-Almanac, which will be sent free to any person who addresses

The Munyon Company, Philadelphia.

GALL STONES or any LIVER DISEASE. Write me all about it. Will tell of a cure Free. Address C. COVEY, R. D. 9, Lansing, Mich.

CUTICURA COMFORT

FOR LITTLE FAT FOLKS

Most grateful and comforting is a warm bath with Cuticura Soap and gentle anointings with Cuticura. This pure, sweet, economical treatment brings immediate relief and refreshing sleep to skin-tortured and disfigured little ones and rest to tired, fretted mothers. For eczemas, rashes, itchings, irritations and chafings, Cuticura Soap and Cuticura Ointment are worth their weight in gold.

Sold throughout the world. Depots: London, 27, Charterhouse Sq.; Paris, 5, Rue de la Paix; Sydney, 10, Bent St.; Cape Town, 73, Hyde St.; India, B. K. Paul, Calcutta; China, Hong Kong Drug Co.; Japan, Maruya, Ltd., Tokio; Russia, Form. Ferrein, Moscow; So. Africa, Lennon, Ltd., Cape Town; Australia, Potter Drug & Chem. Corp., Sole Props., Boston.

For 16c.

Everybody loves earliest vegetables—and Earliest Sweets. Here's a dozen for 16c. and gain you as a customer we order:

		Select.
1000	Rich Carrot Seed.	
1000	Celery, 100 varieties.	
1000	Juicy Radish Seed.	
1000	Buttery Lettuce Seed.	
1000	Tender Turnip Seed.	
100	Sweet Nutmeg Melon.	
100	Musk, 10 kinds.	
1200	Brilliant Flowering Annuals.	

In all 100,000 kernels of warranted northern grown seeds, well worth $1.00 of any reasonable person's money (big catalog) all postpaid for but 16c in stamps.

And if you send 20c we add a package of Silver Queen Sweet Corn, best for table, and Earliest and Best Catalog Else to intending buyers. Write for it. Do it now.

THE JOHN A. SALZER SEED CO. LaCROSSE, WIS.

ACTIVE AGENTS MAKE $25 TO $100 WEEKLY

selling the famous new $15 typewriter. First practical, visible, two-bank keyboard typewriter. Strong, portable typewriter ever sold for so low a price. Does same work like $100 machines. Sells on sight at sight price. Everybody wants one. Big profits, easy sales, enormous territory. Write for full particulars to-day to

Empire Typewriter Co., Dept. B, 203 Broadway, N.Y. City.

THE VALUE OF PERSONAL KNOWLEDGE

Personal knowledge is the winning factor in the culminating contests of this competitive age and when of ample character it places its fortunate possessor in the front ranks of

The Well Informed of the World.

A vast fund of personal knowledge is really essential to the achievement of the highest excellence in any field of human effort.

A knowledge of Forms, Knowledge of Functions and Knowledge of Products are all of the utmost value and in questions of life and health when a true and wholesome remedy is desired it should be remembered that Syrup of Figs and Elixir of Senna, manufactured by the California Fig Syrup Co., is an ethical product which has met with the approval of the most eminent physicians and gives universal satisfaction, because it is a remedy of

Known Quality, Known Excellence and Known Component Parts and has won the valuable patronage of millions of the Well Informed of the world, who know of their own personal knowledge and from actual use that it is the first and best of family laxatives, for which no extravagant or unreasonable claims are made;

This valuable remedy has been long and favorably known under the name of—Syrup of Figs—and has attained to world-wide acceptance as the most excellent family laxative. As its pure laxative principles, obtained from Senna, are well known to physicians and the Well Informed of the world to be the best we have adopted the more elaborate name of—Syrup of Figs and Elixir of Senna—as more fully descriptive of the remedy, but doubtless it will always be called for by the shorter name of—Syrup of Figs—and to get its beneficial effects, always note, when purchasing, the full name of the Company—California Fig Syrup Co.—printed on the front of every package, whether you call for—Syrup of Figs—or by the full name—Syrup of Figs and Elixir of Senna.

CALIFORNIA FIG SYRUP CO.

ADDRESSES: SAN FRANCISCO, CAL., LOUISVILLE, KY., U.S.A. LONDON, ENGLAND. NEW YORK, N.Y.

INCORPORATED

PUTNAM FADELESS DYES

Color more goods brighter and faster colors than are other dyes. One 10c package colors all fibers. They dye in cold water better than any other dye. You can dye any garment without ripping apart. Write for free booklet—How to Dye, Bleach and Mix Colors. MONROE DRUG CO., Quincy, Illinois.

W. N. U., DETROIT, NO. 9, 1909.