The farm scientists and the theorists can preach

all they want to about the economy of the farmer building fine, big sheds to keep the rain off the

manure or other such plans, but it goes without

saying that the average farmer isn't going to see

it that way. But he doesn't have to! The remedy

for such losses is simple in the extreme. In fact,

exactly the right way of handling manure so as

to save all this loss is about the cheapest, cleanest

and altagether the easiest way to handle manure.

elements in manure is to provide plenty of bedding

or litter in the stable to absorb and save all the

liquid. The losses due to fermentation can be

greatly checked by mixing horse manure with cow

manure and making the temporary piles compact

to as to exclude the air, and by thoroughly wetting

the manure, which will assist in excluding the air

The ideal way on the average farm is to follow

the plan, all through the year, of hauling manure

directly from the stable and spreading it at once.

There is a generally prevailing notion among farm-

ers that if manure is hauled and spread in mid-

summer, the sun will scorch it to a cinder and burn

all the good out of it. The government agricultural

station in Maryland, just outside of Washington, decided to determine this matter accurately, and

its analytical experiments have exploded two very

common beliefs, the summer-burning theory being

one of them. The other common belief which has

been blown to atoms is that it is better to plow

manure under in the fall than to leave it exposed

on the land's surface during the winter and then

In the first instance manure spread in "burning"

July and allowed to stand until the following

spring gave better results in carefully checked ex-

periments than that spread in the following spring

just before plowing. In the second series of experiments, better yields were secured after allow-

ing the manure to lie on top of the land all winter

and plowing it under in the spring than were ob-

LANSING, PRESIDENT FOR JUST ONE DAY

The next president of the United States will be

Mr. Lansing's term of office does not depend

upon the action of any political convention; it

is likewise irrespective of any primary or direct

election. In point of fact, it dates back to January

19, 1886, when congress passed an act providing

that, in the event of the death, removal, resigna-

tion or inability of both the president and the vice

president of the United States, the secretary of

contrary to all precedent-although not in opposi-

tion to any law-to hold an inauguration on Sun-

day. Therefore the incoming chief executive will

take the oath of office and commence his term

4, and the time that the new president takes the

This brief term of office is not a mere formality.

be empowered to occupy the White House, to is-

sue pardens, to attend to all the other business of

which the chief executive has control, and to ride

to the capitol, should he desire, as the outgoing

Moreover, this is the first time in the history of

the nation that a secretary of state has had this

honor bestowed upon him and only the second

time in the 140 years of the existence of the United

States that the office has been held by anyone

THE MARK OF THE DEATH'S HEAD.

From the day of the medieval archer, who

notched his crossbow, to the day of the Western

bad man, who notched his gun, men have always sought to preserve some mark of military prowess,

some tally of their victims. This war has not changed human nature. The modern military avia-

tor, the only soldier who still fights single-handed.

does not notch his gun; but he paints a death's

head on the wing of his 'plane to show that he has

vanquished his foe in open combat.

other than the president and vice president.

president on inauguration day.

March 4, 1917, will fall upon a Sunday, and it is

state shall act as president.

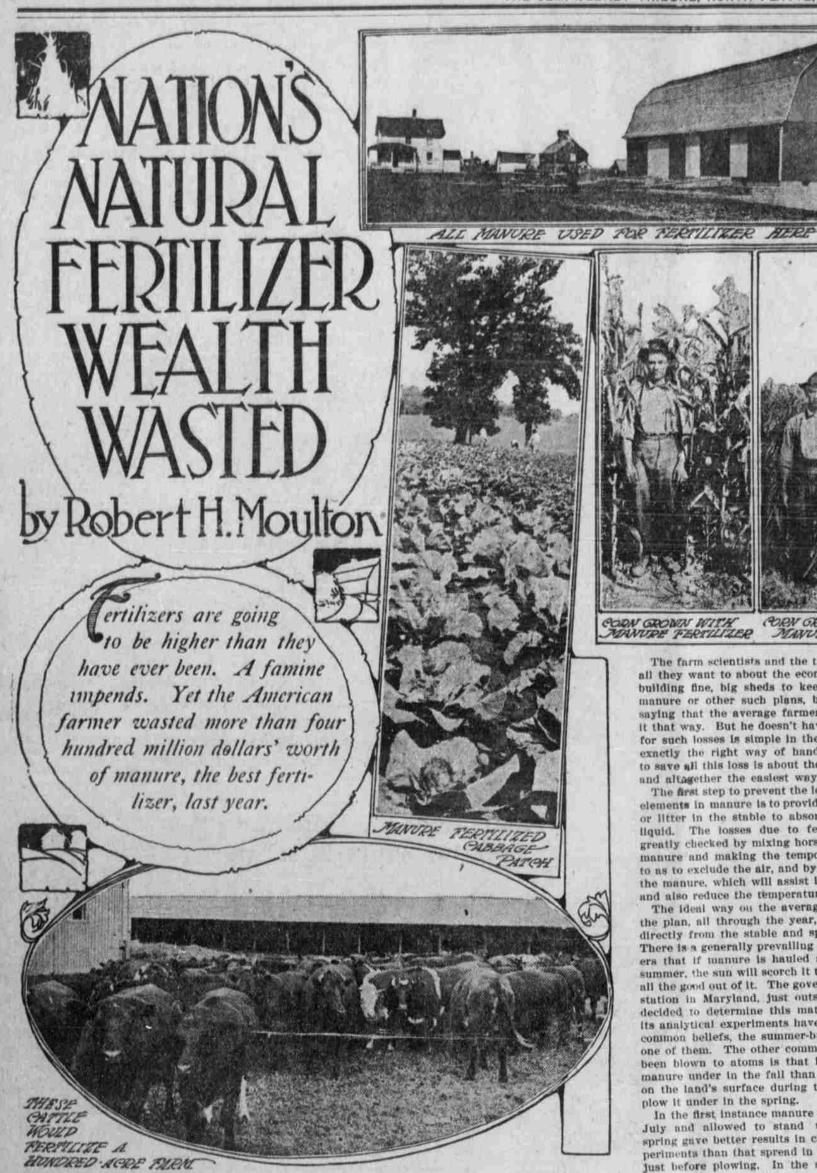
Robert Lansing of New York, the present secretary

tained from plowing it under in the fall.

and also reduce the temperature.

plow it under in the spring.

The first step to prevent the loss of the fertilizing



RTILIZERS are going to be nigher than they have ever been before, owing to the war. So acute has the potash situation become that Uncle Sam, among all his other diplomatic troubles, has been dickering with the allies and with Germany to let a little miserable shipment of 10 tons of potash fertilizer come through the block-

ade for the use of the department of griculture's farm experiment work. Yet with such a fertilizer famine staring the American farmer in the face, he has deliberately wasted during the last year between four hundred million and four aundred and fifty million dollars' worth of manure, the best of all fertilizers. And this, according to suthorities on agriculture and fertilizer, is a regular yearly occurrence. It is not theoretical; it is actual loss, and the strangest part of the story is that the great bulk, if not all, of this waste, could be saved just as easily as not. In fact, most of it would be saved if American farmers were, for instance, Dutch or German farmers. It would be saved by the farmers of any of the old countries. where every pound of soil fertility is conserved as automatically and as naturally as though it were minted money. In Germany the size of the manure pile has long been an index to the wealth of the

What the value would be of the increased crops that would result from this American plant food, now wasted, can hardly be estimated, but the increased yields of corn, wheat, potatoes, and all farm crops would amount to something enormous, On the basis of using this needlessly wasted strength in manure on the corn crop alone it is estimated that the yield would be increased at least a billion and a half/bushels, besides permanently improving the condition of the soil to a tremendous degree. In fact, a good many cornfields of the present day would be so surprised at receiving their quota of this wasted soil fertility that they would not recognize themselves. And yet the Dutch or the German way of handling manure, efficient as it is, is not the best. Americans have discovered the way to prevent all waste in manure and it involves no more labor or expense on the part of the farmer than his present methods through which he loses annually nearly baif a billion dollars.

The average successful farmer or gardener will say that this statement doesn't apply to him; that he knows the value of good manure and uses every bit of it that he can get. But is he certain that he makes the best use of all his manure? When he hauls a ton of manure on to the field, is its fertilizing content all that it should be and is he sure that from 10 to 50 per cent of its crop-producing strength has not been dissipated through leaching, fire-funging, or lack of provision to absorb or conserve the animal urine?

Take as an instance the case of urine alone: A cow will produce 45 to 50 pounds of solid manure n day, but she will also make from 20 to 30 pounds of urine and fully one-half of the nitrogen in her to conserve the urine, for nitrogen is the most expensive element of manure or fertilizer. The other two important plant foods are potash and phos-

good farmers, nevertheless there is probably no product of equal value which is so miserably neglected and regarding which such real ignorance prevails. The first great source of loss is through the incomplete absorption of the urine, and it is not infrequent to see no attempt being made to save this portion of the manure in spite of the fact that it is richer in both nitrogen and potash than is the dung, and in spite of the fact that these fertilizers are more available for the plant in the urine than in the dung.

is the loss incurred by leaching. If a good-sized manure pile is stacked up against the side of the stable where the water from the eaves can drip on it, or if it is piled on a slope or other exposed place, every heavy rain washes away crisp bank notes in the form of nitrogen and potash. These leached chemicals are the most valuable portions of the pile, the most available for plant forcing.

by heating and fermenting. When manure is put ir plies it soon heats and throws off more or less gas and vapor. The fermentation which produces minute organisms. The bacteria which produce the most rapid fermentation in manure, in order to work their best, need plenty of air, or, more strictly, oxygen. Therefore, fermentation will be most rapid in loosely piled manure. Heat and some moisture are necessary for fermentation, but, if the manure is we, and heavy, fermentation is checked because the temperature is lowered and much of simple evidence of the fermentation and the loss of nitrogen which is going on.

Fresh manure loses in the process of decny from 40 to 70 per cent of its original weight. An 80-ton heap of cow manure left exposed for one year lost 66 per cent of its dry substance. Some tests conducted by the United States department of agriculture showed that two tons of horse manure exposed in a pile for five months lost 57 per cent of its gross weight, 60 per cent of its nitrogen, 47 per cent of its phosphoric acid and 76 per cent of its potash, or an average loss of three-fifths.

length of time in a compact plie lost, through teaching and dissipation of gases, 49 per cent in gross weight, 41 per cent of its nitrogen, 19 per cent of Its phosphoric acid and 8 per cent of its potash. Here was a terrific waste, veritably, yet not greater than is to be found in most common farm practice. What would any business man or any farmer think of a city real estate investment or a land investment which depreciated in value in this wise? And what if he discovered that he could have prevented it at almost no cost or extra effort to himself?

ration goes into that urine. So it is most important

Even though manure is highly regarded by all

The second greatest source of waste of manure

shortly after noon on March 5. President Wilson's term commenced at noon on March 4, 1913; there-The third common source of loss is that incurred fore, according to the Constitution, which defines the term of a president as "four years," his tenure of office will be over at noon on March 4, and, even if he is elected to succeed himself, he cannot take these gases is caused by the action of bacteria, or the oath of office until noon on the following day. Vice President Marshall, of course, is under the same disability as the president. Therefore the secretary of state, Mr. Lansing, will be president of the United States for the 24 hours and some minutes clapsing between noon on Sunday, March oath of office on the following day. the exygen excluded from the pile. The strong It is an actual occupation of the power of presiodor of ammonia, so common around a stable, is a dent, with all his authorities and prerogatives, Mr. Lansing-"President Lansing," for the day-will

Five tons of cow manure exposed for the same

# NT-OF-ORDINARY

# ERVIN WARDMAN, PRIVATE



The newspaper life of Ervin Wardman, who became publisher of the New York Sun when it was purchased by Frank Munsey, has been for the most part a steady, day-by-day affair. But it had one lively interlude, during the Spanish-American war. Mr. Wardman, then editor of the New York Press, enlisted as a private, and was sent at first to Chattanooga. Of his stay there a little story is related.

Mr. Wardman had ordered one of his reporters to the encampment for instructions on a certain story, and, as fate would have it, the day of the reporter's arrival at the camp was Private Wardman's day for sentry duty in front of the commandant's tent. It also happened that the commandant and the reporter were old friends, and the latter received an invitation to dinner in the soldier's tent, with a cold bottle on the side.

Naturally the reporter made the most of the situation. He found many occasions for passing in and out of the tent, saluting every time he passed Sentry Wardman, who was obliged by military courtesy to return the salute. It is said that a broad grin ornamented the features of the reporter every time the tent flap closed behind him, but Private Wardman took it all in the line of duty.

Later Mr. Wardman was commissioned a lieutenant and sent to Porto Rico, where he saw fighting and so well conducted himself that he was mentioned in orders and commended for gallantry.

### COSBY TESTS POISON GASES

Col. Spencer Cosby, United States military attache at Paris, has been speaking in a hoarse whisper of late, and his friends are congratulating him on losing nothing more than his voice.

When the German army began the use of poison gases, Colonel Cosby shared the keen interest of his brother military investigators in the new element of warfare, and determined to test the gases on himself. He was given the opportunity by the French army chemists, who had samples of the three kinds used, direct from the front. The two less deadly varieties were tried, and Colonel Cosby found them not especially overpowering.

They had now reached the deadly gas which clutches and kills. The chemist paused.

"You will not try this," he said, appealingly. "Yes, all of them," said the colonel

ir an instant, overpowered him.

"Then we must be very cautious," said the chemist. "Place yourself about a foot away from the bottle. I will raise the glass stopper the slightest possible fraction of an inch, so that only an insignificant portion of gas can escape-but

it will be enough. Now, ready!" He drew the stopper the slightest particle, and only for an instant, with Colonel Cosby a foot away. But in that instant the colonel felt he had been hurled back 20 feet. Tongues of fire were eating at his throat, and ten thousand needles were darting around his neck. It seemed as though live vitriol n emptied in his mouth and was coursing through vocal system was paralyzed. This infinitesimal portion of the deadly gas had,



### **NEW ENVOY TO TURKEY**



Keeping up the custom of sending a public-spirited, broad-minded, philanthropic Jew to represent the United States in Turkey, the president has appointed Abram I. Elkus, a well-known New York lawyer, as ambassador to succeed Henry Morgenthau, who made a distinguished record for himself and his country during trying times at Constantinople.

Mr. Elkus, who has a high reputation as a lawyer, is senior member of the firm of Elkus, Gleason & Proskauer, and is known especially for his work as counsel for the state factory investigating commission, a position which he held from 1911 till 1915. He has drafted some 30 bills, all of which were enacted into law, mitigating the evils of child labor, especially in canneries and tenement houses and prohibiting undue work and night work for women.

Mr. Eikus was born in New York city on August 6, 1867, attended New York college and Columbia university

and was admitted to the bar in 1888. He is associated as member or director practically with every Jewish philanthropic organization in New York city. He is vice president of the Free Synagogue and a trustee of the Baron de Hirsch fund.

Mr. Elkus was married in 1896 to Gertrude R. Hess of New York. They have two daughters, Ethel J. and Katharine, and one son, James Mess Elkus.

## STARTS A CHARITABLE FAD

Madame Bakhmeteff, the wife of the Russian ambassador, has taken a flyer in fashions, and in introducing to the rich and exclusive set at Newport the brilliantly colored cotton and silk shawls such es the peasants of her adopted country wear, she has at the same time giver a stimulus to the cotton trade which should materially increase the Russian market for American cotton.

When women of fashion are more or less taking on the accouterments of war in the style of their hats and coats and the picturesque dress of the peasants of many of the countries at war, this innovation of Mue. Bakmeteff in the way of a light wrap for elther morning or evening has become a charity as well as a fad, for the manufacture of these shawls or scarfs helps the cottage peasant industries of Russia, furnishing work to hundreds of women and children while the men



are at the front. These shawls are a part of the costume worn by peasants in certain districts of Russia, and are sometimes made of silk.