

feeding horses is the lack of variety ducing high grade milk. Cows and in feed. Considering the number of dogs are not natural companions, different grains and feed stuffs it does | either. seem strange that every team owner should not provide for his animals BETTER QUALITY FOR MACHINE a ration that would be perfectly acceptable to its system at all times. It is a fact, however, that no more for more than a year on our dairy than 20 per cent. feed what may be farm, milking around 125 cows. The termed a well-balanced ration.

to the old ration of corn and hay, or in the old crude fashion-filthy at oats and hay, which practical expert- best. Each month we are increasing ments have long since proved to be our herd. A year and a half ago expensive and wasteful. When it that same herd was for sale because comes to feeding your horses just of the difficulties we experienced as think of your own appetite. Suppos- regards the milking of the cows. We , ing you were performing hard work, heard of the machines, investigated ' manual tabor, how long would you them and found that they had been be content to eat two articles of food, used successfully in the east for more ! the same thing for every meal, day than three years. So we saw no reaafter day? It is pretty safe to say son why, if they were able to handle that you would tire of your ration them, our enterprising westerners, in a very short time.

ished body are always the result of make a success of them. We brought improperly balanced food. When such several of the machines on, tested a condition exists in either man or them thoroughly and the very fact norse, the best physical effort cannot that we are still milking every cow be expected; it is impossible. No we own with them, and increasing one or two articles of feed will sup- our herd, should speak for itself. They ply to your horses all the elements are always on hand at milking time of nutrition that their system needs. and the business that has proven a If you want the best results, feed a nightmare to so many, is now a pleasration that contains all the elements ure. We really find them more satisof nutrition in properly balanced por- factory than the average man, tions. Corn alone is not a well bal- They appeal strongly to those favor. anced grain for feeding, neither is ing an absolutely clean, healthful oats or barley.

bly fed more extensively than either since installing the machines.-Lewis corn or barley combined. Barley is Dairy Company. rapidly gaining favor as a feed, however, and when properly combined with the other grains makes an ideal

the necessity for grinding the grain houses and barns, and walks, and a part of the ration. The horse owner great many houses are made out of who fails to do this loses twenty five the cement blocks. It is a handy to fifty per cent. of the nutritive thing for farmers. They can make value. The hard outer covering of the floors of the barn out of cement, the grain makes it difficult to digest, and it does not take the manure up and a very large proportion passes as quick as the dirt or board floors. through the stomach of the animal in Any man who is handy with tools an undigested condition. An examina- can make his own walls and walks. tion of the feeds will show the whole | We made our own walls and was nothgrain and prove the truth of this ing out except the time and the cost statement. When you feed a ground of cement. Some people think they ration you prepare it for quick diges- cannot do anything with cement untion. Your animals utilize it more less they have an experienced hand. readily and there is practically no ... if they only though so they could waste. It should be remembered that fix the boards, mix up the cement the horse digests its food quickly, and and make the walls or walks and do service. whatever ration you feed should be it themselves. When we built our prepared with a view to supply the house we had a wall put up of stone nutrition the horse needs. Your which the house was put on and we horses will work better and keep in lived in it about six months and there better condition on five or six quarts of ground mixed seed than they will wall out. Then we went to town and on eight quarts of whole grain.

Reed a variety of grains properly balanced, and have it well ground the money that was spent to pay the and you will not only have better mason was thrown away, and the war horses, but it will cost you less money that we made is still standing today

Notwithstanding all that has been Indiana Farmer. said, it is not likely that these matters will be looked after unless a man loves his horses and enjoys caring for them. It may not be thought crops were the main cause of hostilpracticable to apply the Golden Rule ity to birds; and the crow was the in handling horses, but if it were principal object of attack down to the possible all other rules could be laid latter part of the present century. aside. There would be no danger of in 1805 a crow-scalp tax was in force horses going hungry or without suf- in Virginia, under which taxpayers ficient water, they would not be clip- in five countles were required to de ped and left to stand in a cold wind liver three crow scale; annually, or without being covered, the barn would pay a penalty of 41/2 cents for each be kept clean, they would not be over. missing scalp. In 1826 a premium of worked or over-driven and the humane eight cents on crows was paid by officers could go out of business. some of the counties of Virginia, and When man is educated to look on the two years later by the whole State horse as a fellow creature, and treats Meantime, Delaware had authorized him accordingly the question of how the creation of a crow bounty fund in the horse should be treated will Newcastle County as early as 1810 be settled. The principal thing and New Hampshire had established is love. Where it reigns we a premium of 121/2 cents on crows in need not worry about details, they 1817-1819. Some years later New will take care of themselves. Love Hampshire re-established the rewards, solves all problems.-J. P. F., in the and subsequently offered premiums of American Cultivator.

NOTES FOR THE FARMER. cur tempers?

Let the horse eat all the dirt he and Maine (1889-1891)-ten cents in wants. It is good for htm. Occa- each case.-American Cultivator sionally throw a chunk of turf into

his box. This is the day of the specialist, and the specialist is only some one who has learned to do something bet. acre or two of rape will afford a surter than the average run of people prising amount of green feed. A good engaged in similar work.

water are cheap and essential parts can be worked well. The cats will of a balanced ration

price of milk are incentives to in would the rape alone. But the rape crease home production of feed for will grow along and by the time the dairy stock, and many farmers plan oats are seven to nine inches high to raise more oats and corn than the rape will be several inches, too.

curatives for tuberculosis and they grows up, thus furnishing green feed are even greater as preventives than for a good deal longer period than as remedies. Give them a trial in the oats would alone.

of blacksmithing is worth a pound of ly dry period of August when other veterinarying.

will pay the highest price.

is kept in a state of fear and appre- -Homestead.

VARIETY IN FEEDING HORSES. hension is in no condition to do her One of the commonest faults in natural best work in the way of pro-

MILKING.

We have used the milking machines results have proven most satisfactory, The other 80 per cent. still cling and we shall never milk another cow who do things and go at a thing to A bad digestion and a poorly nour- make it win out, could not likewise

product. It may interest you to know Of the three grains, oats is proba- that we have doubled our business

CEMENT ON THE FARM. Cement as a usual thing can be used in a great many ways. It is used We cannot emphasize too strongly in making nearly all the walls for came a heavy rain and washed the got some cement and fixed it better than it was made by the mason, and to obtain this much desired result. solid as a rock.-Ralph Mickey, in the

BOUNTIES FOR CROWS. Until recently depredations on grain ten cents in 1829, 1832, 1835 and 1849-1851. Maine followed next with an eight-cent bounty, which was in force Which is cheaper in the long run, from 1830 to 1834. The most recent to keep an edge on our tools or on crow bountles of consequence are those of New Hampshire (1881-1883)

#### RAPE FOR SHEEP.

If the pasture area is limited, an plan for this early pasture is to sow Abundance of pure air and pure oats and rape as early as the ground grow faster than the rape and will The high price of grain and the low | afford pasture in a shorter time than The oats furnish lots of pasture then, Pure air and sunshine are the great and as they are eaten down the rape

hog houses, and cattle barns and in | Rape sown on well prepared ground Your own sitting and bed room. | during May or June will furnish an Watch the horse's hoofs. As ounce abundance of forage during the usualpasture is brown and dry. For late If you wish to cash in your weeds the pollination stage, and if a sufand underbrush, the sheep and goat last plowing. This will furnish the pasture as soon as the corn is past Gentleness and good treatment are the pollination stage, and if a sufas essential to the well being of the ficient acreage is sown there will be dairy cow as proper feed. A cow that plenty of feed until hard frosts come. IT SOMETIMES TAKES A LARGE CHEST TO HOLD ALL ONE'S MEDALS.



-Cartoon by Triggs, in the New York Press.

#### Millions of Germs in Cracks of Dishes

Dr. Wiley Experiments on Chinaware Taken From the "Quick Lunch" Rooms and Hotels---Cause of Appendicitis---Chemist Blames Unclean Condition For Many Inflammatory Diseases --- Urges Better Household Sanitation

leave their offices each noon to snatch and chocolate eclairs as it is to the a hasty lunch, the Government has a man with the drooping mustache who word of advice to offer. It is this: regales himself each noon on "coffee Whenever a restaurateur offers you a cracked mug and a chipped, seamy plate on which food is served, flee it as you would the pestilence. In the says: recesses of those cracks lurk thousands of bacteria, and they draw no necessarily appeal to every responsidistinction between the millionaire ble individual who seriously considers employer and his \$10 a week steno- the matter of eating clean and whole-

ley, has just concluded experiments cracked mugs the question of houseon cracked china utensils taken from hold sanitation becomes more imthe lunch rooms of Washington. The perative than ever, and a study of conditions they find to exist in the the sanitary conditions in private and restaurants here are duplicated in public life would in many instances every big city. In New York and Chi- furnish startling results. cago, where trade at "quick lunch" | "Many of our hotels, establishments is much greater, a far taurants and cafes are particular to larger population of germs is be- see that splendid serving rooms are lieved to have taken up its abode in provided and elaborately furnished, the cracks and crevices of the table which from exterior appearances

by the Government came about as a guests, but let one go behind the result of a crusade being waged scenes in many places and note the against unhealthful kitchens and changed conditions. The picture may serving rooms in the District of Col- be entirely different from that ex-With the approval of Secre- pected. tary Wilson and Dr. Wiley the Government chemists were turned loose tors and iceboxes during hot weather on the trail. They discovered mill- may develop conditions beyond huions of germs in the cracks.

cal chemist of the department, had storage is difficult to say. However, charge of the tests. Several dozen it is a regrettable fact that many such cracked mugs, plates and saucers tak- places often contain highly objectionen at random from the counters of able material, and if not intended for lunch rooms and from the cafes of immediate use it often contaminates hotels were examined. The result and ruins the entire contents of the was that Dr. Stiles discovered twenty- icebox. three distinct species of organisms lurking in the cracks and seams. In sirable to eliminate the use of cracked the final test it was found that these dishes for the reception of food mateorganisms ranged in number from 486 to 14,580,000 to every square more careful observance of the

to the family of bacillus coli.
The bacillus coli is blamed as the

among which is appendicitis. the cracked chinaware are due to un-

Sensational Murders of a

Washington, D. C .-- To those who | to snatch a substantial meal of cocoa

"This is a question which must some food. When we consider the The Bureau of Chemistry, at the great number and variety of organ-head of which is Dr. Harvey W. Wi- isms studied in relation to these

"Many of our hotels, public resseem to be all that could be desired The examination of the chinaware for the welfare and comfort of their

"The sanitary aspect of refrigeraman toleration. Why people do not Dr. George W. Stiles, bacteriologi- take better care of these places of

"In concluding it seems highly derials, and to make an appeal for a known hygienic measures to protect Nearly all of the bacteria belonged our food from unnecessary and undesirable contamination.'

Dr. Pasquale Griffo takes sharp iscause of many inflammatory diseases, sue with Dr. Wiley. "Of course there among which is appendicitis." are germs in cracked china," he said, Many of the other bacilli found in "as there are in everything else in the universe. And it may be that some clean conditions. These may not be of these are bad instead of good. The noticeable, and the kitchens of the proportion of bad germs to good ones lunch rooms may be clean and spot- is as 6 to 1,000,000,000. The bad less, but the impossibility of cleans- germ may kill you; the good ones ing the utensils thoroughly when they may be eaten by the spoonful without are cracked leaves the bacilii to in- harmful results. A healthy person will eat many billions a day, or at a

#### crease and multiply. The presence of the breeders of single meal, without getting so much disease is just as much a menace to as a suggestion of the stomach the girl who has left her typewriter ache."

Flot Summer; Their Motives

July 21-Andrew Bergen Cropsey, of Bath Beach, Brooklyn, shot and killed his wife at No. 1749 Eighty-fourth street; rage. July 19-Mrs. Ottilice Eberhard killed, her daughter wounded at Coalburg, N. J.; Gustavus Eberhard, of New York, strongly suspected,

July 15-The Rev. G. B. D. Prickett, former Recorder at Metuchen, N. J., shot and killed by Archibald Herron, whom he had sentenced to July 12-Hazel Drew murdered, body thrown in a pond near Troy,

June 29-Dr. N. H. Wilson, of Philadelphia, poison sent to him in a June 21-John Klevenz, sexton of the Church of the Most Holy

Trinity, Brooklyn, shot wife, killed self; insurance.

June 16 John H. Blackmeyer, out of a job, killed his mother-inlaw and shot his wife at No. 144 West One Hundred and Forty-fourth street; despair.

June 8-Brooding over her husband's attack on their neighbor's lit-tle daughter Mrs. Lena Winnett, of Stapleton, killed her baby and herself; humiliation. June 7-Sarah Koten shot and killed Dr. Martin W. Auspitz, No. 157

East Ninety-third street; revenge.

June 5 - Frederick Rosatage, No. 181 Union avenue, Brooklyn, shot wife, killed himself; quarrel.

Stor, 200 in Gold for Leopold

Dogs to Guard Luxembourg From Private Estate in Uganda. Paris .- Man's best friend, the dog. London, England .- A dispatch to has been found a new occupation in

the London Daily Mail from Entebbe, has been found a new occupa Uganda, states that two shipments of Paris, that of museum keeper. gold, valued at \$300,000, have passed M. Dujardin Begumetz, through Entebbe from the Kilo of the Fine Arts, has decided to enmines, in King Leopold's private do- roll in that body fox terriers for the main in the Congo Independent State, new Luxembourg Museum. They will from which foreigners are rigorously act as autiliaries to the human guardians, simply being used by night to It is surmised that territory cov- give an alarm when necessary.

ering more than a hundred miles in The careful recruiting of the new Ituri province is enormously rich in canine functionaries has already

Museum in Paris.

### The Mystery of Human Life

By Elizabeth Stuart Phelps,



seems to me that there are, when all is said, but two ways of regarding the mystery of human life. Either give it up, the whole thing, as a tragedy too black for respect, and give up with it all the beautiful beliefs which have come into it from some source of unutterable patience, or heroic faith, give up, frankly, God and goodness, Heaven and happiness, faith and purity and peace-give up all that makes life tolerable, death cheer-

ful, pain reasonable, and hope possible-or else accept the system of things at its worst, candidly admit its monstrous perplexities, and boldly swing the whole array of them over, into the gaze of a sweet reasonableness which sees in the blackest of them the shadow of the eternal sun. If we make angels of our spectres, we need not be afraid. In a word, if we can see in the worst facts of this life an argument for their justification or even their explanation in another, we have gained a point of view of which the most brilliant sceptic in this scoffing world cannot deprive us.

## How a Comet's Tail Grows

By Waldemar Kaempffert.



bridal veil was ever so filmy as a comet's tail. Hundreds of cubic miles of that wonderful appendage are out-weighed by a jarful of air. By means of the spectroscope we have magically transported this fairy plume to our laboratories, and have discovered that it is akin to the blue flame of our gas-stoves; for the gas by which we cook and the delicate tresses of a comet

both consist of combinations of hydrogen and carbon, appro-priately called by chemists "hydrocarbons." When it first appears in the heavens, far removed from the sun, a comet is a tailless blotch of light. As a comet swims on toward the sun, the hydrocarbons of the tail split up under the increasing heat into hydrogen gas and hydrocarbons of a higher boilingpoint. With a still closer approach to the sun, these more resistant hydrocarbons eventually yield to the increasing heat and are decomposed in the form of soot. Interplanetary space is airless. Hence the soot cannot burn. It must pursue the comet in the form of a dust train. The particles constituting that train are small enough to be toyed with by the pressure of sunlight, No matter where the comet may be in its orbit, whether it has just entered the solar system or is speeding away, that plume is inevitably tossed away from the sun, just as if a mighty wind were blowing it from the central luminary. The appendage of shining dust is the symbol of the triumph of light over solar gravitation.-Harper's Magazine.

# My Vision.

Mankind's Emancipation From Evil Was Presented By Julia Ward Howe,



NE night recently I experienced a sudden awakening. I had a vision of a new era which is to dawn for mankind and in which men and women are battling equally, unitedly, for the uplifting and emancipation of the race from evil.

I saw men and women of every clime working like bees to unwrap the evils of society and to discover the whole web of vice and misery, and to apply the remedies, and also to find the influence that should best counteract evil and its attending suffering.

There seemed to be a new, a wondrous, ever permeating light, the glory of which I cannot attempt to put in human words-the light of the new born hope and sympathy blazing. The source of this light was born of human endeavor, immortal purpose of countless thousands of men and women who were equally doing their part in the world-wide battle with evil and whose energy was bended to tear the mask from error, crime, superstition, greed and to discover and apply the remedy.

I saw the men and the women standing side by side, shoulder to shoulder, a common, lofty, and indomitable purpose lighting every face with a glory not of this earth. All were advancing with one end in view, one foe to trample, one everlasting good to gain,

And then I saw the victory. All of evil was gone from the earth. Misery was blotted out. Mankind was emancipated and ready to march forward in a new era of human understanding, all encompassing sympathy and everpresent help. The era of perfect love, of peace passing understanding.

### The Days of the Clipper-Ships

By Captain Arthur H. Clark



HE American elipper-ship era began in 1843, as a result of the growing demand for a more rapid delivery of tea from China, continuing under the stimulating influence of the discovery of gold in California, and ending with the outbreak of the Civil War. These memorable years form one of the most important and interesting periods of maritime history. They stand between the long, weary centuries during which man navigated

the seq with oar and sail-a slave to unknown winds and currents, alike helpless in calm and storm-separating and at the same time connecting those ages of comparative darkness with the successful introduction of steam navigation, by which man has obtained mastery upon the ocean. After countless generations of evolution, this ear witnessed the highest

development of the wooden sailing-ship in construction, speed and beauty. Many of the clipper-ships-indeed, nearly all of them-made speed records which were not equalled by the steamships of their day, and more than a quarter of a century elapsed, devoted to discovery and invention in perfecting the marine engine and boiler, before the best speed records of the clipperships were broken. And even today there are not more than thirty ocean mail steamers afloat whose speed excels the best twenty-four hours' run of the American clippers of fifty years ago, while their records under canvas, over courses encircling the globe, for the superb stake of commercial supremacy and championship of the seas, stand unbroken and unsurpassed. -Harper's Magazine.

### Where the English City Is Supreme

By Frederick C. Howe.



HE English city, too, is free from the spoils system. Jobs are filled for efficiency and not for pull, and the employee is retained during good behavior. This is a real democracy of merit. An alderman would think of demanding a city contract for himself as soon as he would the creation of an unnecessary job for a friend or relative. Public opinion, too, would tolerate the one about as quickly as it would the other. Not that the English city has any civil service laws. It doesn't need them. Public opinion regulates the service just as it does official conduct in other regards. This is

the only kind of a merit system that protects the public from a bureaucratic administration. It is along these lines that the English city is supreme. It has a fine

sense of itself. It has an intolerant conscience. It commands the service of a high grade of citizenship. It has never known the ward-heeler, and is exacting in its demands on its councilmen. And the people delight in the city's successes. They are proud of a fine tramway balance sheet. They applaud an efficient manager. They are glad when the city makes a profit. Not for the sake of the profit alone, but because of the success of it all. The people care for the city and talk city in a way that we do not and cannot compre-

This is one of the things we lack, this sense of a city. We have not yet aroused an organized public opinion that is jealous of the city's well-being. We expect inefficiency as a matter of course, and shrug our shoulders when an official goes wrong. And we do not expect the police and health departments, the civil service laws or the purely personal side of our political life to be above reproach. It is in its thrifty, commercial side that the English city excels. This is largely due to the fact that only tax or ratepayers vote. The council represents property, not persons. This gives a rather sordid, ungenerous tone to all discussion. For the taxes are assessed against the rental value rather than upon the capitalized value of the property itself And the taxes are paid by the tenant and not by the owner. In consequence the English councilman is always in terror of the taxpayer. And the people get the taxpayer's administration and an administration that is very timorous of anything which increases the rates.-From "The American and British City," in Scribner.

The German Emperor has a wellequipped pottery which brings him in | Mary bachelors and widowers over \$50,000 a year.

During the reign of William and 25 years were taxed 1 shilling yearly.