

about lighthouses. Whenver science comes along with an improved light a new lighthouse is not built for it. It is simply nstalled in the old one. The axiom about new wine in old bottles does not apply to new lights

in old lighthouses at all.

The modern age of lighthouses was ushered in with the building of the third Eddystone by John Smeaton in the year 1759, according to an article on the subject in the Edison Monthly. This lighthouse was important for several reasons. In form and construction it was superior to the lighthouses of the time, and the illuminant, though nothing better than two-fifth-pound tallow candles, aggregating 67.2 candle power, afforded by the steadiness of the flame the possibility of future improvement through the use of devices to direct and concentrate the beams.

As in the organic world there are creatures of a day, while others, like men, enjoy a reasonable longevity, so it is in the world of architectural construction, and lighthouses belong to

must be admitted that lighthouses,

when serving a double purpose, have

not always figured as temples to the

gods, for by the British, who built this lighthouse and put it in commission in

also as a military prison. It was con-

structed with a dungeon underneath.

and just 100 years later, in supplying

a foundation for an iron stairway, evi-

vault containing a human skeleton.

This old lighthouse also had its secret

underground passage, the entrance to

which was barred by an iron door lo-

in this year of reconstruction, the

holes that were made in the sides of

the tower by cannon shots from Brit-

ish men-of-war were cemented; so if

the tradition must connect lighthouses

and temples, the one at Sandy Hook

was certainly reared to Moloch, the

god of war, though in the past 100

years it has lighted many a British

ship on pacific errands into New York

With the growing complexity and

advance toward perfection of light-

tablished at varying distances from

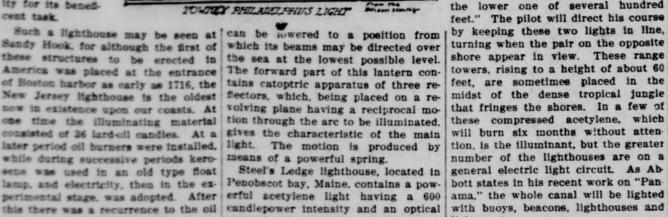
the land, the character of the light,

whether double or single, colored or

white, fixed, flashing or intermittent,

it is put as a signal,

the long-lived class. For one of these a bundred years is no great matter, and thus it happens that many a modern lighthouse has seen revolutionizing illuminants come and go, and has itself profited by the latest lamp surgery performed with ever - increasing delicacy within its lantern. whereby its anclent body has taken on new dignity and capability for its benedcent task.



flectors, which, being placed on a revolving plane having a reciprocal mo- that fringes the shores. In a few of tion through the arc to be illuminated, these compressed acetylene, which

THE SANDY HOOK LIGHTHOUSE

Penobscot bay, Maine, contains a pow- bott states in his recent work on "Panlamp, and at the present time incan- range in clear weather of 121/2 nauti- light posts. descent vapor is employed. Here it

cal miles. The installation comprises six A-50 accumula little pigs and they revel in it. tors, with a flasher arranged to show single flashes, and a one foot burner with a fourth-or-

The following years saw the introduction of electricity into a number of lighthouses. Most important and powerful of all lights was and still is, in this country at any rate, the Navesink, which in 1898 was provided with a five-second white flash electric light, the flash having a duration of .08 seconds. Its bivalve lens has a focal distance of 700-like the new light installed at South Foreland

Electricity is now being used in the so-called "unattended lights." Lights of this description will, upon the completion of the Panama canal, guide ships on their way through Gatun lake. In passing through the latter the canal makes eight turns, some of these being at a sharp angle. The range lights are of reinforced concrete, "so placed in pairs that one towers above the other at a distance back of the lower one of several hundred feet." The pilot will direct his course turning when the pair on the opposite shore appear in view. These range towers, rising to a height of about 60 feet, are sometimes placed in the midst of the dense tropical jungle number of the lighthouses are on a Steel's Ledge lighthouse, located in general electric light circuit. As Ab

MUST GET TO ROOT OF EVIL

the year 1764, it was intended to serve Only Real Cure for Insomnia is to Remove the Causes That Have Brought It On.

"The chief cause of sleeplessness," dence of its former use was made apsaid Dr. Robert Jones, a London speparent through the discovery of a cialist on mental diseases, in an address before the international congress of medicine. "is mental or physical pain or suffering in some form or cated in a near-by hillside. Then, too,

many definitions, but is best described as an uneasiness, varying from a feeling of slight discomfort to extreme distress; and it may arise from the deviolence, pressure or undue tension in any part of the body. It has many synonyms, anxiety, grief, solicitude, mental distress, uneasiness, and, according to its quality or intensity, it may amount to agony, torture or tor-

house system, lighthouse zones are es-"The treatment of sleeplessness is done by removing the causes, and they passed, 'How's your poor foot?' these may be classified as either physical, mental or moral," further asbeing determined by the requirements serted Dr. Roberts, and he then urged of its position and the use to which While great elevation would seem a leading requirement if a coast light is to perform effective service, it is a positive disadvantage in certain localities and at certain seasons of the sants. The scientist attributed the in- traordinary amount of hard work year, when, as in St. George's channel, foggy weather is the rule, for the fog cloude envelop the light and render

last decade to insufficient sleep. it quite useless for the guidance of vensels below. The "fog light," or victim of insomnia-a place not far venture the opinion that the highly "occasional light," at South Stack, on the island of Anglesea, England, was distant from the home will sometimes respectable life of French country constructed to meet these conditions, suffice. Fresh air in abundance is an houses is dull beyond anything con-As inclined plane was excavated in absolute necessity if one would sleep ceived of in similar houses in Engwell. A single window open a few land. But in Paris the gay and the the rock, and upon this a tramway was laid. The light, being contained inches at the top and bottom is not plodding lives to a great extent overin a carriage, which in clear weather enough. Open every window, and se- lap, and lead to the confusion of the was left at the summit of the incline, cure the effect of open-air sleep. A visitor.-Spectator.

thin bread-and-butter sandwich sprin kled with cayenne pepper and eaten after midnight will sometimes induce sleep when other means fail.

London Street Sayings.

London street sayings, like music hall songs, have generally but a short life, the Chronicle of that city says. "Has your mother sold her mangle?" Who shot the dog?" "How are you "Pain is a sensation experienced by off for soap?" survive only in old novall reflective living things. It has els. Some, however, are revived with slight alterations. The expression of dissent emphasized 12 months ago by "Not in these trousers" used 30 years ago to be conveyed by the tag. "Not rangement of any function, also from in these boots." One street saying still occasionally heard dates back more than 60 years. Mrs. C. W. Earle states that at the time of the 1851 exhibition "the excessive fatigue and weariness so stamped on the face of everybody who wanders about huge exhibitions became in that year a source of amusement for the London street to break the habit, which should be boy, and took the form of calling as

Perhaps the last thing that hasty the necessity of sleep, declaring it to English visitors to Paris become aware be more essential than food, and that of is the quietness, the thoroughness, where drugs were resorted to they and the simplicity of French family should be taken only when prescribed life. Behind the volatile and flippant by a responsible physician, as all sleep | ways of the theaters, the cafes, and inducing drugs act as heart depres- the newspapers there is hidden an excrease in insanity among boys under grave routine, and signal simplicity of fifteen and girls between fifteen and living. To this family life the strangtwenty that has been recorded in the er is with difficulty admitted. The casual acquaintance is not made free. A change of scene often benefits the as in England, of such realities. We

BEGINNING AT THE BOTTOM | boy is learning the business of stock ! friends, and don't in the least resent broking. The father insisted that his it if their boys are set to lick stamps of the office, and so although he was their apprenticeship.

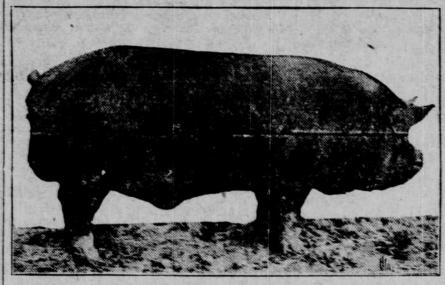
born with a silver spoon in his mouth | "I know one boy who, when he is that mouth is today used for licking | twenty-one, will come into an income at least twice as large as that of his According to a city merchant, present employer. I remember his wealthy office boys are by no means boss' asking him to stay late one eveancommon. "Business men who have ning. You would have smiled to hear made money by their own exertions," the 'office boy' ask to be excused, as he said, "know the advantage of start- he was dining with his people at the The boy's father is one of the wealth- ing from the bottom, and they often Savoy and had to hurry home and

Weedy and Grassy Crops. pare his land and cultivate with the to have weedy and gressy crops.

Soft-Meated Fowl. The only way to secure a soft-meated bird is to keep them growing "from hatch to hatch."

Grind Hen's Feed. Grind about one-third of the hen's feed for her and she will be more helpful in filling the egg basket.

COMMON SENSE SUGGESTIONS IN HOG LOT



Prize Berkshire Hog.

Hogs are fond of sugar beets and hrive on them. Mange is mainly caused by filth in the sleeping quarters.

In the hot weather hogs should have good pasture and little grain. Sunlight is a natural tonic for the

The feeding pails should be scrubbed and scalded every day. Young pigs that are weaned should

be fed four or five times each day. We do not believe in dosing hogs with medicine except in serious cases. result. Beware of the sway-back pig, no matter if all the other points are good. The hog is an economic accessory on the well managed diversified farm.

Reading other people's opinions oftthey will always keep clean if given

the chance. Excellence is the result of hard labor and paying attention to little de-

tails in pig raising. It is a bad practise to take all the pigs from the sow at once. She should

be dried up gradually. Just because it is only a hog, do not forget that clean, pure water is more acceptable than slime. Give plenty of range, clean pens,

will as a rule take care of itself.

better breeders and better feeders.

Any man who persistently breeds his gilts too young will find the quality of his breed steadily deteriorating. Select your brood pigs from the largest litters, as they are generally

better breeders and better feeders. No matter what the subsequent use of the pig on the farm is to be his early development should be carefully guarded.

When the green corn comes along a little later, do not stuff young pigs all they will eat or thumps will be the

A sow that suckles a big litter of hungry pigs needs a great deal of nourishing feed, but some farmers never seem to learn that fact. The farmer not prepared with wov-

en shows us how far off we are in our en wire fencing, with ample alfalfa or clover pastures, is not properly Hogs thrive best when clean, and prepared for the economical production of pork.

Newly purchased hogs should be carefully examined for vermin, and should not be turned out with the herd until they are known to be free from

these pests. Certainly a good forage crop for the hogs is one of the most profitable crops a swine breeder can raise especially when one considers the fact

they will harvest it without cost. . The main points to be looked after clean feed, clean water and the hog to be successful with hogs are good shelter, a warm, dry bed, freedom from Select your brood pigs from the lice and worms, plenty of good drinklargest litters as they are generally ing water and nourishing food at regu-



FEW PECULIARITIES OF SWARMING BEES BY STOCK RAISING

Leaves Old Home and Starts New Colony.

(By FRANCIS JAEGER.) Bees increase by swarming, or di-Long before swarming-time bees begin to make preparations for it. First acid and potash. they raise a large number of drones or male bees, from which some day

the young queen may choose her mate

strength the queen lays from eight to twenty eggs in especially prepared wax cells called queen cells. The egg laid in a queen cell, being a larva which the bees will feed abundantly on "royal jelly." This special food and the large cell will make the egg develop a queen. The ninth day after the egg is laid, the bees cover the wormlike larva which hatches from it, with a porous cap. The queen

cell at this time is not unlike a pea-

nut in appearance. As soon as the

first queen cell is capped over, a sign is given and the old queen with her workers leaves the hive. After circling in the air for a while the swarm settles upon some tree or shrub and sends out scouts to find a new home for them, and the old queen son should learn the whole routine and post letters as the first steps in never again sees her old home or her children, and even if starving to death she will not go back to the old house for one drop of honey.

> Feed and Care Count Much. It is wrong to expect the cow to yield a large profit simply because she is well bred. She must have feed and nothing.

The man who fails to properly prehoe and plow is the man who is apt

emerge from the sea with water run- simple puffed cap of rubber cloth ning off from garments which cannot which preceded it. be water-soaked.

and trimmed with cotton or light wool dry. it is cut on simple lines. The waist larger. And once the little ones form. fastenings like those on a glove.

silk bloomers that reach barely to the ter the art and enjoy themselves forknee. It is all right for the miss, or | ever after.

HE playmates of Neptune swarm | for anyone else, to dispense with the beaches in costumes and bath- stockings and sandals, but few people ing caps almost as varied as the faces | care to avail themselves of this priviof their wearers. Since the introduc- lege. The feet are more comfortable tion of rubber fabric in all sorts of in light sandals. And stockings make colors and patterns there is a choice quite an important element in the of solid colors or gay stripes or at- good effect of the suit. It is an item tractive plaids. The entire garment of style, this dressing of the feet or the sash and tie and cap only may properly. The cap, as the picture

But the pretty bit of headwear pic-This rubber tissue is used for caps, tured is hardly practical for the girl ties, and girdles, or sashes, oftener that really swims. And she who dives than for the bathing suit, perhaps be- would be sure to leave it behind her cause it is a novelty which is not when she comes up. It is all right for thoroughly introduced. And also cer- those who only paddle about in the tain fabrics, like taffeta silk and mo- water and stroll on the shore. For hair, make suits that shed water real water sport the plain rubber cap readily and held color creditably. | worn down over the ears and fitting The suit shown in the picture may snugly about the head is the only one

be made in either of these fabrics that will keep the hair dry, or partly braid (shrunk before it is applied). Every year the importance of teach-Like all the garments now fashionable ing girls to swim looms up larger and and skirt are joined under a braid a taste for the water it is easy for belt, and the dress fastens with snap them to learn, because they desire so much to know how. Boys strike out This one-piece suit is worn over for themselves, usually, and soon mas-

Parasols at the Polo Game

be made of this cloth. It is, of course, shows, is quite an elaborate bit of

impervious to water, and the bathers headwear, quite different from the

Suits for Playmates of Neptune



ture altogether admirable. But if ors shirred to the edge. the occupants of the boxes and grandstands might have been matched stripe pictured in the illustration. against any other such concourse, any This style is often shown with a wide where, as to the excellence of their black or colored border about the edge appareling, it is safe to say the New and often with a flowered border of Yorkers would have more than held roses against a colored ground. A their own.

with the stands packed with men in seems to be not in high favor just light suits and straw hats, making a now). In this particular combination, suitable background for the gay tints either in stripes or checks, one may worn by the women in their summer finery. The colors were soft, with many white and a considerable number of black and white costumes in evidence. Except for surquoise-blue and bright green, nearly all colors greatest number of admirers. Cerise were so toned down in shade or so lightened to tint that hardly a trace after that gold or orange color. The of the former liking for the strong or garish remained.

ored parasols, and these provided the decided color notes. They were of

GREAT throng of smartly dressed cerise, or green or gold or (in greater A people, New Yorkers, English and numbers than any other) black and people from the "outside" world, gath- white combinations. There were paraered to watch the international polo sols with wide black and white stripes, matches, arrayed in clothes that need running around or up and down, and not fear any comparison. In the there were those of narrower stripes. games the English literally galloped There were checks and bars in black away with the trophy, and the Ameriand white, and many of these had cans took their defeat with a good na- narrow borders of ribbon in vivid col-

Perhaps the best-liked model is the black and white parasol is the best The field was a cheerful spectacle, substitute for the all-black (which add a border of narrow shirred ribbon in any of the bright colors, and change this border to suit.

Next to the black and white and the all-white parasols, green has found the may be conceded the third place, and black parasol, except in the small hand shades or "carriage" parasols, is There was a liberal display of col- rather conspicuously absent from the fashion parade.

JULIA BOTTOMLEY.

Yellow in Any Pale Shade Is Now Distinctly Proper for the Trimming of Lingerie.

"ellow is in all its glory. For not only trimming for evening frocks.

FASHION ADOPTS NEW COLOR | are yellow ribbons used to lace up all sorts of lingerie and yellow roses and ribbons used on negligees, but tiny yellow muslin borders appear on handkerchiefs and yellow blouses of chiffon and crepe de chine and linen are For a long time yellow was hardly much worn. There are many new and counted in with pale pink and pale interesting names for the various popblue as an appropriate color for all ular shades of yellow. Probably maize occasions-for use on linegrie and is the best of the light shades for gennegligee, for the touch of pale color eral wear. Along with the increased on the lace or chiffon blouse and for use of yellow comes the increased use the light-colored blouse itself. Now of yellow roses for corsage flowers and

In the city of London there is an office boy in the service of a firm of stock brokers who drives to the office in an automobile. But he does not keep it up out of his salary, which

Sons of Wealthy London Merchants

Start as Office Boys, to Learn

test merchants in the city, and the place their sons in the offices of dress."

Boarder for 45 Years' Tenure. ings speak of gentility and the fine made the hotel his headquarters. oints of decorum. Of the one hup-

dred boarders, five are young women. The hotel is one of the strictest in pect to remain. The waiting list is else."

Right down in the midst of a dis- a popular woman's club. The star trict of trade and traffic, near Astor boarder, who is looked upon with the China and India and coffee from Brazil ace, in Pittsburgh, is a family hotel greatest respect by all the recent com- when our own meadows, roadsides and aged by a woman. For more than ers-those who have been received gardens contain aromatic plants that wears the hotel has been in the within the last ten years—is a clergy- could be made to give us just as delihands of one family. All the furnish- man, who, for the last 45 years has clous beverages? asked Dr. Bouquet

Pigg-"The way of the transgressor the city and no person given to levity is hard." Fogg-"Yes; but the trouble or giddiness of conversation can ex- is it is generally hard on somebody

Make Tea of Native Herbs. Why should we import tea from in an article in the Parts Temps. He suggests the common vervain and the bee-balm as examples. Others of

which our ancestors used to make inusions are or age blossoms, the buds of lime trees, plack current leaves and

MAINTAIN FERTILITY

Old Queen With Half of Workers Barnyard Manure and Good Phosphate Produce Excellent Results, Used Together.

All the grains, when sent to market, carry away from the farm plant viding one large colony of bees into food taken from the soil. The same is two. The old queen with about half true of milk, poultry and poultry prodof the bees leaves the old home and ucts, cattle, sheep and swine. There starts a new colony somewhere else. is a steady and ceaseless outward cur-The young queen will take charge of rent of the elements of fertility. Evthe old home as soon as she hatches. ery load of hay, vegetables and fruits means a loss of ammonia, phosphoric In trying to replace fertility lost by

the never-ceasing sale of products, the farmer uses barnyard manure. This When later the colony increases in material contains less of the three elements of plant food above mentioned than the crops extract from the soil. It is evident, therefore, that, sooner or later, a complete commera common worker egg, will hatch into cial fertilizer, furnishing ammonia. phosphoric acid and potash must be bought in order to make good these

This is why commercial phosphates came into existence. Barnyard manure and a good phosphate produce excellent results when

used together. A typical artificial manure or phosphate for grain may be said to contain 2 per cent of ammonia, 8 per cent of available phosphoric acid and 2 to 5 per cent of potash.

Routing Cabbage Worm.

There are various ways of routing that universal pest, the cabbage worm. Road dust, wood ashes or flour sprinkled lightly over the cabbage heads when wet with dew will interfere with the workings of the insect. Soapsuds sprinkled over the plants has also the desired effect. But, perhaps there is nothing more satisfac tory than salt and water. This not care or the breeding will amount to only finishes the worms but tends to make the heads develop more fully.

> Shelter for Manure. Few farmers feel that they can afford a manure shed, but an even better arrangement is a covered shed with a cement floor where all manure is dumped and on which the animals

Storing Alfalfa Hay. When there is any large amount of alfalfa hay to be loaded and put in the barns, the hay loader should of course be used. In this case the hay must be allowed to cure in the wind-