remember when in boyhood, not a step advanced from toyhood, When in through the schoolroom win-dows floated sweet the wild birds'

call,
I would close my desk at dinner,
Like a hardened little sinner.
And the after-nooning found me playing
bookey from it all.

What to us the far-off sorrow
Of the whipping on the morrow.
For the day seemed all the future—'twas
a hundred hours long,
And each hour we were enjoying
By the wood and pool—just boying.
While the wild birds caught our laughing tones and wove them into song.

And to-day a robin twittered
Through the window, and my littered
Desk became the ink-bespattered one my
schooldays used to know,
When the voice of spring was crying
And some voice in me replying
To its every note and echo—and some
yearning bade me go.

But a stern duty fetters

Mo to these unanswered letters

While through half-opened-shutters aweet

the wild birds ery and call,

And I'm wishing, wishing, i might steal off somewhere, fishing,

Lock up every care and worry—just play
thookey from it all.

J. W. Foley, in the New York Times.

"God!" breathed the prisoner, "God!

All through the waning day he slept

held him, caught mid-struggle by insen-

The man turned his head to face

"Hey, rattler!" he called cheerily

and scraped some grains of sand

But when he saw the start and

shudder with which the creature woke,

the anguish of returning consciousness,

suddenly he was sorry for his act.

struck at its cord quivering from head

The sun rose presently. Again the

wenry panorama of the day unrolled

before the eyes of the two victims.

Sometimes, indeed, the growing heat

no apprehension of their gruesome

indifference of the reptile, the man

be could hold hard to sanity and to

But as the morning passed a new

weaken with every hour and the man

trembled. He spoke to it soothingly

at times and had or believed be had.

the power of quieting its paroxyms.

ingly for some knowledge of its needs.

Would it live longer for the taking of

his dimming eyes, the snake loomed,

when the snake fell in its spring seem.

Instinctive love of life still strong

eyes and cruel beak. When the scrutiny

shout to scare it from its place. His

scarcely a whisper, and the bird

He closed his eyes after this and

for a long time lay still, only rolling

his head from side to side that the

vultures might not light upon his

At last, when the sun lay low

the horizon, he ceased the movement

a cloud of birds, scared by the sudden

quiet, hung high in air; swarms of

upon his arms and body; the sage-

brush all around rustled with pungent

dryness and to the west the sky burn

hard and bright as burnished copper.

with a sobbing breath, he flung round

straining his body against the cords

The snake too had moved. The

throng that bound it was drawn taut

head across its finegrs. It lay thus

outstretched, not striking, its glazing

And while they lay so suddenly

there came to pass the impossible, the

one uncounted chance. From far

across the desolate sage-brush desert

creak and grinding of heavy wheels.

The man strove to cry out and, fail-

ing, gnawed desperately at his baked

trickle of blood which paid his ef

forts had moistened his dry throat,

rible cries. Above him at the sound

the startled birds swirled to the west.

The make, too weak to spring, had

yet dragged himself to a coll, his flat

Between the cries the man could

hear the abrupt stopping of the wagon, the confused exclamation of men's

he raised his voice in shrill and ter-

sounded to them the barking of

which held him.

eyes on the man's face.

For a long time he waited. Then,

swaved back and forth unmoved.

breathless,

voice came dry and

death.

upon him.

body.

toward the recumbent body.

sleep which he had broken.

held himself strongly in hand.

THE MAN AND THE SNAKE (1) : : : : By E. MIRRIELES. : : : :

All round the circle of the hills, the | hausted, -his convulsed body fell back dazzling sky pressed down unclouded to quiet, the bird was gone. Shudder to the touch of the parched rim-rock. ingly the man raised his eyes. Far Between the hills the shallow basin up, half lost in blue, but ready, tirelay baked and breathless. Over it the less, it hung above him. tense air quivered with heat. Within, no bird fluttered nor water puried nor and turning his blanched cheek to the green plant raised its head. Only the sand, he fell into a sort of sleep. desert children, sage-brush and greasethrough the approach of night and the wood and long-spined eactus, gray but never dying, fived on there in the swift desert change from heat to cold. drought, sterile and forbidding as the When he awoke the first pale amethyst of dawn was in the sky. The snake

land which gave them birth. Everywhere was silence upon the was sleeping, not as snakes are wont place, everywhere was immobility, save to sleep in freedom, head tucked to where the man lay and where beside tall and sinuous fold lapping on fold. him the bound snake whirred and but with his swollen body back-thrown writhed and rattled in the impotent and stiffened against the stake which

The man lay stretched on the hot sibility. parth, stark naked, his face turned to the sky. A buckskin thong passed across his throat and was drawn taut between two roots of sage-brush. The noose which held his ankles was secured about a clump of greasewood and both arms thouged at the wrists, stretched wide as in crucifizion. Heavy bands of buckskin spanned his body so that to the prisoner there was When the snake, writhing round, left but two possible movements. He to tall, he would have given an hour could turn his head from side to side, facing on the one hand the snake, on of his own rest to have restored the the other the miniature forest of sagebrush; and he could clench and un-

In this last freedom the final ingenuity of savage captors had found. The snake was quiet, weakened by his expression. With the left hand tight long struggle. The man, strengthened clenched, the snake's wild stroke fell by sleep, restored by the night's cold, just short of its aim. Should sleep

or insensibility relax the fingers, the sometimes, indeed, the growing heat reptile's head might overlap him.

Since early morning, through the Sometimes birds, many now, swooped increasing heat of the day, the man low around him with hourse cries and had lain there, grim and silent as the flapping of heavy wings; at such times gray hills around him, save when now his whole body grew tense beneath and then he raised his hourse voice the stress of almost uncontrollable in defant shouts. The snake, on the disgust and terror. But he lay still. other hand, struggled and fought un. Not for his reason's sake dared he ceasingly against the cord which held again give way to the expression of him, striking impartially at it, at the fear. It was a comfort to him in just removed fingers or at the wooden these moments that the snake showed stake to which the cord was tied, grovelling his body in the sandy earth. neighbors or eyed them only with the writhing and tugging with protruding axid eyes of hunger. Watching the tongue, and all the while translating in whire and hiss the blind fear of feared less. Fixing his eyes upon it.

to watch; once or twice when the and hovered the vulture ministers of dertake to teach, make it plain, simstirred his fingers in the sand, the ruse each time rewarded by the swift spring anxiety should die first? It seemed to and fruitless stroke. But mostly he lay still, all his mind bent on endur-

The man had been placed there to die. He knew it and the knowledge in his fevered mind he searched halttinged his thoughts with a strange curiosity. There were three ways in which death might reach him; through life? And if by stretching out his the snake, through sunstroke or by the band he could delay its end, what then weary route of thirst and hunger. The of the lengthening of its pain? Before second and quickest of these ways the light mountain air, vibrantly hot now a refuge, now a menace. A dozen though it might be, rendered improb- times, he half relaxed his hand only able. For the snake, it was part of to draw it quickly close again. Once the man's torment that at any minute by the movement invite an end, brief with a cry of utter deprivation. When borrible to the mind. It moved again be drew them in, the doubly horrible to the strained imag-

There was one other chance. An A buzzard had risen at his cry and unexpected rain-storm, a heavy night perched on the sage-brush at his head. stretch the slender buckskin thong coarse, draggled feathers, its filmed, which held the rattler that unaided he might reach and strike his victim, had grown intolerable, he strove to This was the element of uncertainty in the grim problem. This it was that sent the man's eyes searching the bare horizon with a look half dread, half

On one of these weary journeys of sight a tiny speck of black above the western hills attracted him-a steady pin-point in the dazzling blue. He shut his eyes a moment in order to look again the more intently, and when he opened them, lo! the dark points were two. He watched them uncomprehendingly, as slowly and stendily high in air they moved from west to ants and lesser insects crawled and fed is more expensive. When at last in mid-beaven the sun's sheer strength beat down his gaze, he was the loneller for loss of this one sign of movement.

The sense of heat had by now grown into anguish. The man's exposed body drew and quivered beneath the sun's rays as though each inch of it were endowed with a separate life. Unseen insects brushed and fluttered upon it, leaving beneath their light pressure a trail like fire on the blistered surface. and painfully it had thrust its swoller The snake lay prone, exhausted almost beyond striking. The man, noting it, smiled grimly and scraped his fingers noisily in the loose earth. As the snake whirled to front the challenge, he curled his hand close with a taunt for its futlie effort.

He was thus engrossed when suddenly across his face swept a sense dog. of delicious coolness. He turned his head; close above him almost within touch of his free hand, a great black bird, carrion in every movement, hovered on steady, outspread wings. -Its ahadow fell across his face; its eyes, beadlike and listening and greedy,

looked straight into his own. For an instant they stared thus, man and bird. Then with a cry the man flung himself against his bonds, strugeling and straining at them for escape from this new horror. On his body, dry till now, the sweat poured forth in streams. Blood gushed from With shricks, with oaths, stumbling words of prayer, he breath whiffed on his forehead and a man's face bept to his own. There was a sudden tightening of the buck-sking though as a knife passed beight against the fate which held

neath them, its cool blade searing like fire on the blistered flesh. Hands dragged him from his place. A man on either side he was held erect. Through a maze of pain and weakness, he could hear the comment of his rescuers.

"Alive, all right!" "God! He'll die on our hands." "Carry him to the wagon!" "Look out! Step wide of the rat-

Hands beneath his shoulders, they

bent to the task of Hfting him. The sufferer sent out a groping hand in protest. He swallowed hard, struggling to speak. His naked foot thrus close-perilously close-to the fanged

"Turn him loose, too," he command ed .- San Francisco Argonaut.

MAKING OVER A MOUNTAIN.

Helena Objects to Great Big Bald Hill-Will Make a Park on It.

The strangest and most interesting park project ever undertaken in this country is to be found at Helena. Mon., writes John H. Raftery in the Technical World Magazine for July, where the citizens are engaged in transforming the bald slopes of a conical mountain which towers nearly 1400 feet above the city into a for est park.

There is no spring, well, brook or pond upon the bare sides or rocky summits of this singular park; nor will it be possible to raise water from the valley for the irrigation of the trees, shrubs and flowers, yet the expert foresters of the Federal bureau who spent last summer planning for the planting of the park are agreed that several varieties of evergreen will flourish there without water or

A spiral footpath has been graded from the city to the summit of Mount Helena, and there an ornate pavilion has been erected upon the highest point of rock, 1400 feet above the main street. In the cliffs of the peak there are two spacious natural caves, which will be tenanted by specimens of the native bears, lions and other carnivora of these mountains.

Parks enclosing herds of deer, antelope, moose, elk and buffalo will be added as the present "imits of the tract are extended upon the desert lands which lie back of the mountain.

How to Train Your Dog.

In managing your-dogs there will not perhaps be much fun unless you can follow your individual notions on what constitutes enjoyment. There is not perhaps a single thrill in twisting your soul to carry out processes which rasp against the grain. However, I am not your parish priest, but a dog man. Whatever your imagination may invent, a dog is still a dog, and has none of the attributes which we assign to yourselves when we feel mushy. A dog understands "yes" and is equally competent to grasp the "no." Outside of that, he is all dog and follows his dog ways. He indulges in no mental refinement and will not com-Sometimes the man turned his head endurance, though around him perched many of your changes of ple and unchangeable. It is a pity that he must be taught not to jump up on people and compliment them with his caresses. He means well, but must be disciplined sternly into knowing that it is not good form under any circumstances. The discipline need not be accompanied by any severity. A light touch with a whip, if applied invariably, will soon settle the matter. Some keanel-men adopt the plan of stepping lightly on the hind foot, and it is perhaps the clearest way of conveying the idea. - Joseph A. Graham, in "Starting an Exhibition Kennel," in The Outing Magazine.



But if electricity cannot hold its own in the lighting of large open spaces in London, there is a steadily dryness and to the west the sky burned widening field for it indoors. The time is near at hand when, with the cheapening of the production of electricity and the discovery of a more economical filament for the incandescent lamp, the use of gas will be confined to the kitchen and the street -London Daily Graphic.

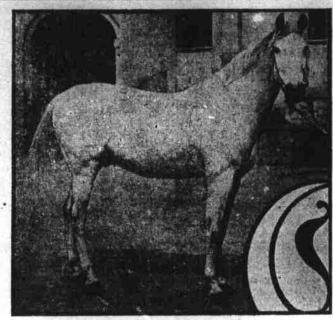
Government Had No Objection. The late Nat Head, once Goovernor of New Hamshire, sometimes surprised those who approached him to gain his political influences by his

witty parrying of their requests. Colonal Barrett, an estimable official upon the Governor's staff, died, and with unseemly haste his wouldbe successors began to push their claims, even while his body was awaiting burial with military honors. One candidate, somewhat bolder than the rest, ventured to call upon Governor Head, thinking to ascertain the bent of the Governor's mind upon the important question.

"Governor," he asked, not to speak in a manner too postitve, "do you toink you would have any object tions if I was to get into Colone Barrett's place?"

The answer came promptly, "No I don't think I should have any oh jections, if the undertaker is willing,

Earl Cromer is one of the most thorough students of the Bible whom the English public have among their prominent men.



THE MOST BEAUTIFUL HORSE IN SPAIN Selected by the King as a Present For His Bride.

The Chinese Bride's Veil.

lampshades? There's the top in

But it isn't.

Rather not.

Doesn't it look like a latest in

It's the bridal vell of a blushing

Chinese maiden who is about to

promise to love, honor and obey her

It is especially suitable for travelers

or couch which can readily be moved

from place to place. It is construct-

ed to be particularly useful upon the

ordinary "day coach" or railway

trains, when it is impossible or un-

desirable to secure a sleeper. In

When

Tolded

addition it is equally well adapted

for use as an ordinary couch or bed

in the home, upon the lawn or upon

camping trips. The body portion is

in two sections, hinged together. The

cushions are also hinged together.

one of the cushions having draft

guards at the top and sides. The en-

tire cot folds neatly and compactly to

form a package approximately the

size of a suit case. A waterproof

carrying case is provided to protect

the cot from the weather, with means

for conveniently carrying it as ordin

Apostle and Epistle.

the mountains of Tennessee stopped

one evening to water his horse before

a little cabin, outside of which sat an

old colored woman, watching the an-

ties of a couple of colored boys play-

"Good evening, aunty," he called.

"Laws a massy! Mah chillun!

Deed dem's man daughteh's chilluns.

Come hyah, you boys," she called

As the boys obeyed the summons,

"Clah to goodness, sah, dem chil-

"Ye see, mah daughtel

the Philadelphian inquired their

luns is right smaht named!" said the

apparatus shown here—a pair of for-

tively grip the clothes so that they

resembles very much a pair of scis-

sors, having two levers intermediate-

is shaped to form a handle and the

hollowed out to form a recess, the

weight and also affords a firm grip.

manufacture these forceps of alumin-

Peter."-Pittsburg Post

sharply, "an' speak to d' gemman!"

'Cute pair of boys you've got. Your

A Philadelphian riding through

ary hand ba rage.

ing near by.

children?"

old woman.

other-in-law forever after.

Has Features of Simplicity, Convenience and Efficiency.

bead blossoms and the deep fringe. It is well known that lap-boards and sewing tables are often used for "cutting out" garments, and for accurately performing the work the cloth must be maintained in an unwrinkled and comparatively taut condition. An Ohio woman has patent ed a lap-board which has features of simplicity which could also be applied to a table or any similar article.



The lap-board shown here is of the ordinary kind, a marginal groove being made in the sides. In this marginal groove is placed a strip of penetrable material, as felt, into which nins can be easily stuck. The groove and strip can extend part way or entirely around, as convenient.

In a table it would be desirable to insert into all sides, while in a lap-board the side containing the ss will generally not nutro the strips Such a lap-board would be useful in holding work while a seam is being basted or sewed. Even the clothes could be held in position on the table by the addition of such a groove, and when used on library tables, the strip used as a pin-cushion.

IN THE PUBLIC EYE.



Photo of Young Queen Wilhelmina and Prince Henry, Her Consort.

For the Hands.

A few drops of cider vinegar rubbed into the hands after washing clothes dese hvah boys right out de Bible, will keep them smooth and take away sah. Dis hyah one's named Apostle the spongy feeling they always have Paul, and de udder's called Epistle after being in the water a good while

An Aid to the Housewife. Handling boiling clothes with an ordinary pole was not considered an up-to-date method by an Iowa in-



Bitter Cry in England. To cultivate a desirable, elevatng and charming social set is as eed and clothe their progeny.

Nevertheless, the bitter cry of the British daughter is heard in the land:

protection of its colonies.

tion to such Government experiment climate to which it is best suited.

"Take up thy bed and walk." This is the Biblical quotation which inspired a North Carolina woman to design the portable cot shown here. and others who have need of a bed opportunity for investment in conse-

> en credit for having provided-this country with asparagus, while celery came originally from Southern Europe, and rhubarb from Central Asia. Still unsatisfied with all that other countries have given us in the way of food supply, the aggressive agricultural scientist of to-day has been touring the world and exploring its faraway corners and uninhabited desert and forest nooks for what may turn out to be only a slip of a plant or a sample of an undeveloped fruit. Each,

value and financial profit. Descriptions have been given in the

Evening Post's correspondence of the last six months of some of the noteworthy novelties brought to this country in this way, including durum, or macaroni wheat; chayote, the new delicacy of the egg plant variety"; the cactus cheese, which is so nearly like the ordinary cake chocolate as to be readily mistaken, except for its slightly tart flavor: new varieties of tangerines and other specimens of the orange family, and of grazing plants which will grow in the semi-arid parts of the West where there are less than six inches of rainfall. In each of these instances there has been an accomplishment worthy of note, but the list has not yet been exhausted. Other plants and fruits are being developed along the same lines, and descriptions of ome of them will be available before long for the information of the public. At the present moment it is possible to give some brief facts about several experiments which have progressed far enough to indicate a gratifying success in as great measure, probably, as those Salads have come to be a part of the

principal daily meal for most persons who live reasonably well, because of done got 'ligion long ago, an' named the many kinds which can be prepared at small cost and which add so much to the enjoyment of the repast. But there is a continual longing for new kinds of salad, and chefs are puzzling their brains to arrange new combinaventor. He therefore evolved the tions. To meet the demand has been one of the tasks which the agricultural ceps so shaped as to firmly and postexplorer has set for himself, and already he has succeeded to a degree. In can be handled without tearing. It Japan he has found a vegetable, called by the Japanese udo, which is as common there as celery is here. It is so ly pivoted. One end of the levers enjoyed by the Japanese that they imort the canned article to this country other into spoons. These spoons are rather than do without their accus- of this substance. The cassava is tomed food. It cannot take the place also not subject to the fungoid disback being slotted, which reduces the of lettuce for variety of uses, but may be adapted to a palatable dish by the to fields, from which a large proper stween the handles is a spring. It addition of certain sauces. It has not tion of the starch now sold in Great is the intention of the inventor to yet been given a distinctive American name, but it grows in thick blanched shoots of two feet or more in length, further in portant advantage over and prospers splendidly. By slicing the shoots into long, thin shavings and serving with a French dressing, there is presented a silvery looking salad with unusual crispness and a new and

ALL THE WORLD LEVIED UPON FOR PLANTS AND FRUITS Where Many of the Present Staples Originated .-- Peru Gave the Potato, Tomato

In this same general class is a fruit

cies which will provide the toughness

of fibre required and on which the del-

icate mangosteen can be grafted, is

now the work of the investigators.

The fruit has a white pulp, more ten-

der than that of the plum and an al-

of similar variety and marks it as dis-

These several experiments in fruits

contain great possibilities to the fruit

growers of America as well as prophe-

cles of new delicacies for the gratifica-

well-to-do citizens whose material pros-

perity develops the market for new

food products. All parts of the world,

have been levied on to men'its new

sensations for agricultural and borti-

cultural, América, and as quickly as re-

this opportunity, since through them

the general public may be supplied

Because of this co-operative plan, by

perts is made available to every grow-

er and experimenter in these lines

legislators who are willing to vote the

do in the interest of all its citizens.

THE CUTTING OF CAMEOS.

Stones Are Plentiful, But Large, Per-

fect Pieces Are Costly.

Cameos are cut from the stones

onyx and sardoynx, which are said

to be so plentiful on the Uruguay

River in Brazil that ships often carry

them away as ballast. Nevertheless,

perfect pieces of large size are costly

A piece suitable for a large portal

This stone is preferred for cameos

because of its hardness and durability

and is suitable for such work owing

to the fact that it comes in layers of

contrasting colors, as black and

white, black and cream or red and

white. When the cut figure is sunk

nto the stone instead of being raised

The cost of these gems is due to

the time and skill required in the

work. Formerly a small gem might

occupy an artist for a year or more,

but with modern appliances the work

can be done more rapidly. Still the

ncient work bears the paim for artis-

The cutting is now done by hold-

ing the stone against a revolving

irill, whose soft steel face is covered

with diamond dust. No steel is hard

enough to cut the stone. The utmost

patience and caution and delicate

andling are required, as the slight

est slip may spoil the work.—Chicago

New Source of Starch.

In a bulletin of the Jamaica De

sartment of Agriculture H. H. Cous-

ins, the Government chemist, states

that the high percentage of starch in

the cassava makes the latter more

valuable than the potato as a source

eases prevalent in the German pota-

son is unrestricted, and this gives a

manufacture of starch from the eas

sava can be done so cheaply that th

German potato starch will be driver

the one-crop-a-year potato.

tic excellence.

Tribune.

the cutting is called an intaglio

most satisfactorily.

Japan Has a Promising One in Udo--- A Delicious East Indian Mango Soon to Come From Florida.

and Lima Bean---Successes in the Quest For New Salad Plants---

The recent agitation on the subject | and little or no frost. There have been of preparing ments and ment products mangoes sold in this country, but tiny has turned popular attention more bave not been of the true, high-grade strongly than any other cause to an stock which has given the fruit its interest in a regetarian diet, and this fame abroad. It was in 1889 that the la turn has induced individual curios- East Indian Mulgoba mango was introity as to the origin of the vegetables fluced into Florida. It prospered for which we know best in this country, several years until the great freeze of writes the Washington correspondent 1805 killed all but one tree, and that of the New York Evening Post. Every- was saved only through the exertions one knows, of course, that potatoes of a horticultural expert on the ground. are the mainstay of the Irish and rice Thousands of grafted trees now growof the Chinese. If there is a failure ing in Florida owe their start in life of the wheat crop, there is famine in as fruit producers of the first grade to India and the sympathy of the whole this one lonely tree which nearly succivilized world is drawn upon to sup- cumbed to the frost eleven years ago. ply the wherewithal to tide over the The experiment has reached such a year's deficiency. England must main- stage that the marketing of a crop is tain a great navy to prevent its being expected by another season. Mangoes offered in delicatessen shops to-day are isolated from its bases of food supply in case of war, as much as for the disdained by the experts as unworthy of the name, which will be lived up to

Taking less u from these patent by the new variety. The Oriental facts, this country, in spite of the mango is known as the most luscious unusually wide range of its products fruit that grows, having no more tibre and its practical immunity from barm than a peach, but being much more on this score even under stress of war, richly flavored. Another inducement to cultivation is that they will grow on has undertaken, through a bureau of the Department of Agriculture, to soil of no particular value and consearch the whole world for every sort tinue bearing for years. This, in addiof growing thing which has possibili- tion to enormous crops, is likely to reties as a food product. Having found suit in general introduction in such sections as afford the proper climate. such a plant, it has been imported here for development in the Government's taboratories and subsequent distribu- called mangosteen, which the Department of Agriculture experts hope to stations or private growers as could propagate as a new industry for Porto develop it more scientifically for the Rico, Hawali, the Panama Canal zone, and perhaps some other localities.

Many persons consider Ireland the Some specimens are already growing home of the potato, which has become in Hawaii, as in Jamaica and Trinisuch a necessary part of the average dad, but it is not entirely acclimated American's diet. The plant came to as yet. The mangosteen has a delicate flavor and attractive appearance, but this country from the highlands of Colombia and Peru, a section of the world lacks a sturdy root system which will make it commercially practicable. To which has furnished a number of the best known and most widely cultivated discover a representative of this spevegetables of the present time. The tomate was introduced from Peru back in Civil War days, when ignorant people had an idea that it was a poisonous plant. Agricultural statistics of the past year show that superstitions fear of the tomato has disappeared suffiluring flavor which is hard to describe. The rind is of a purple brown shade iently to encourage the growing of this popular food on 500,000 acres. The that distinguishes it from other fruits lima bean is another vegetable of poputinctively as the red-skinned banana is lar consumption which came from the same South American country, having different from the ordinary sort. been introduced here about eighty-five years ago. Certain sections of the country have come to grow lima beans in such profusion that farmers have een able to obtain special railroad tion of the increasing thousands of rates for sending their crop to city mar'ss's Thousands upon thousands of dollars invested in the orange groves of California and Florida obtained that

quence of the introduction of orange cuttings from Brazil. England is giv. 8946 are attained they will be made

however, brings to the explorer the germ of an idea by which he hopes to develop the new plant, through Government aid, into a staple of both food

rom the English market.-Argus.



Earth Roads.

A road should not be wider than wenty-five feet. An ordinary rain will never hart a road, but the storm waters and snow thawing in spring therefore the roads should not be made over twenty-five feet wide, so that the centre of the road is close enough to the ditches to give the falling waters a chance to reach them. The centre of a road should not be more than two feet higher than the bottom of the ditches; if the centre is higher a loaded wagon will slide into the ditch if the road is frozen in winter.

I also find that in a long slope,

say one-half mile long, or longer, and

where the road is higher on one side should be put in every forty rods to load the water into the lower ditch. as the higher side of the road gathers more water. For culverts nothing bit sewer tile should fing in a culver take into considera ground to be drained is or sloping. If the ground on the level a small tile, by gi it the proper fall, will take care of an immense amount of water: but on sloping ground it will take a much larger culvert, as the water comes rushing down the hills, and if the culvert is too small and has not the proper fall, the water will run over the road. The culverts should not be laid too deep, to keep them from clogging,

but the dirt on the top of the culvert

should be higher than the adjacent

ground, so that in case the water

should break it will not disturb the A road bed twenty-five feet wide is wide enough even on a hillside. It is true a deep ditch will wash out on both sides, but as the road wears down it will also wash in the centre. Then in repairing the road the dirt should not be dragged into the centre of the road, but should be carried to the sides and dumped into the ditches. I have done this several times and find it satisfactory. This will lower the road, but will leave it high and hard in the centre if the roads are laid out in the centre where they belong, and are made straight and given the right width, and culverts are put in wherever they are necessary, and put in right and of the right kind of material. and the roads are kept in repair Then, if the State will pass a law to aid the counties and townships in making mucadamized roads, the roadbed will be in such a shape that the gravel or sock may be applied at once, and will insure a great saving to the community

as a lasting improvement. The above embodies the results ob tained by a very sneed ful roadbuilder known to those who can carry on the In the State of Kansas constructing work most successfully. Usually the earth roads.

Dustless Road in View.

State experiment stations are given Prospects of a dustless roadbed without the use of oil or cut stone is pleasing officers of the Illinois Cenwhich the work of the Government extral road. Though gravel is conceded to make the easiest riding roadbed, its dust feature has made it broughout the country, there is ala nuisance General Manager Rawn. ways a large majority of the National of the Illinois Central, and his assistant, Mr. Fritch, have made a find necessary funds for developing it. What in the way of dustless gravel. Reno individual grower could afford to cently the company began taking attempt on his own responsibility and gravel out of the Mississippi River at expense, the Government can and does the Memphis bars. The gravel, being washed for centuries, is free from soil, the only thing on it is sand and all but twenty-five per cent. of this is washed off after it is taken from the river. The first of this new ballast is being used on the Yazoo & Valley line. It is clear and clean as a crystal, and must ever be dustless. The Illinois Central will extend the new-found ballast over all lines of the system, giving it an easy riding, and at the same time a dust-

less roadbed.—Buffalo Courier.

Public Roads in Alabama. In 1904 there were 50,089 miles of public road in the State of Alabama. Of this mileage, 1261.5 miles were surfaced with gravel, 392.5 miles with stone, fifty miles with shells, twelve miles with sandclay mixtures, and four miles with chert and slag, making in all 1720 miles of improved road. It will be seen from these figures that 3.4 per cent. of the roads has been improved. By comparing the total road mlleage with the area of the State, it appears that there was 0.97 of a mile of public road per square mile of area. A comparison of mileage with population shows that there was one mile of road to every thirty-six inhabitants, but only one mile of improved road to every 1063 inhabitants.—Home and Farm.

Oil in Making Roads.

The use of oil in road making was tried with some success in experiments at Jackson, Tenn. The best results were obtained with heavy natural oils, which were applied while hot, being heated on the cart by steam, using about one-third gallon per square yard. The road material and the oil formed a mixture something like concret which produced little dust, and proved quite desirable, also reducing the of traffic. The coating is about one eighth thick. The experiments, very recent, are not yet regarded as te with regard to the lasting effects of the oil.

Polish Women's Perfect Feet.

Polish women are renowned for their beauty, for the perfection their hands and the smallness their feet. They place the fine of the hands above all charms. regard my hands, not my face," salf one, and it is reported in Warm that the Vienna shoedealers keep separate case of shoes for the de ente feet of their Polish custome

The world's navies number 2201 ve