BY ST. GEORGE RATHBORNE. **********

ner 1806, Rosener Bourstan's Sous.

KHAPTER XL [Continued.]

Bomething has evidently befallen the rescally Brahmin since night ed in. What did you conclude was the matter?" he asks.

"Well, I thought the fellow had evidy been barking up the wrong tree," says Sandy, solemnly. This time Grimes laughs aloud.

"Good guess, my boy. He owes the goose egg on his roreness. ose-egg on his forehead, the halt in some one we know."

"Ten to one it was that Mynheer foel' exclaimed the correspondent quickly.

"Go up head, young man. You are an ornament to the guessing class. Sure enough, it was our Joseph who handled the Thug without gloves. The beast was on a mission for his master. and was thrown through the window by the messenger from Khartoom."

Of course Sandy pricks his ears up at this chance for a sensation, and plies the other with questions, which Mr. Grimes answers to the best of his ability. The story is soon told, and followed by what he has, this morning, seen the baron do-exercise his skill with sword and revolver, as though there is work ahead.

"As sure as you live, it's going to be mip and tuck between these two yetr I'm ready to bet on Joe, but I admit the case is awfully doubtful, with that human devil against him. Still, Joe's star of luck has never yet deserted him. He's the only foreigner to come out of Khartoom alive. Let us hope and pray he will finally outwit that baron and carry off the prize."

Sandy has never been more earnest in all his life, and if something would only come up whereby he could show his friendship he stands ready to chip in, no matter what the cost.

Thus Joe's friends talk over matters and endeavor to discover some way whereby the explorer can be benefited. They feel sare the baron has made up his mind to push matters to the wall. and that he will not hesitate about the means he employs.

If Joe is challenged, of course he may have the choice of weapons, time and place. He can, therefore, make the best of the bargain. The one thing they fear is that the baron may arrange it so that the insult comes from him. Well, if so, Joe will probably avenge it on the spot, and not dream of sending in a challenge.

Thus they draw consolation from the situation and hope for the best. Where can Joe have taken himself to? They fail to find anything of him. nor do they see Tanner and his daughter. T. s delay is not to Sandy's liking, as he is anxious to send a telegram to the city on the Mediterranean, engaging his passage for India, and frets under the lapse of time.

The morning has gone and the afternoon with it.

It is evening when the two friends run across Tanner in the hotel-Tanner, who greets them in his usual hoisterous manner, as he does all his

Sandy sees his opportunity and asks the orator his intentions about travel, and hints at how nice it would be if all of them could go on the same steamer to India, which proposition quite takes the other by storm.

Making inquiries as to date of sailing and a few other things. Tanner figures on his own plans, and then announces that Sandy may include himself and daughter in the party.

"How about Mynheer Joe?" "You'll have to see him personally." returns the orator, with a sly twinkle in his eyes, as though he can make a pretty good guess that the party mentioned will not be far away when they leave Alexandria.

"Where may he be found?" asks Sandy.

"Think I know. You see a party of English officers and leading men were bound to fete the brave boy who came from Khartoom with the last news of poor Gordon. They took him over to the barracks, where a spread had been ordered. I was pressed to go, but Melly would be waiting for me at the hotel here, and as I am a dutiful parent and never disappoint ber. I gave up the idea."

Sandy has a cloud on his brow. How long ago since the party went

"More than half an hour, I reckon," replies Tanner, consulting his timepiece.

They must have reached the wine and cigars."

"Very probably," "Mr. Tanner, was the baron pres-"Certainly. That man is every:

where!" It is evident that he does not bear malice against the baron, or at least fails to show it. Sandy and Mr. Grimes exchange

glances. "It will be done there?" says the

latter. "No doubt of it, sir." replies the cor-

respondent. "What's all this about?" asks Tanner, noticing their peculiar nods and

glances. "We're off to see if Joe goes with us or stays in Cairo."

And with the words the two friends. deave Tanner, heading for the bar-

As they reached the door of this institution, loud voices are heard, excitement seems to reign, and the colonel can be heard exclaiming:

"Gentlemen, remember you are under a military roof! Reserve all demonstrations until we separate!"

CHAPTER XII.

"WITH SWORDS-AN HOUR AFTER SUN-

RISE! The words are deeply significant and Sandy clutches his companion's arm;

the look exchanged between the two denotes that they understand the true inwardness of this affair; it hardly needs the glance they take into the mess-room to corroborate their suspi-

It is a scene they will never forget as long as they live. A dozen or more officers and gentlemen have been at the table; the cloth is removed and cigars and wine served. At one side of the Colonel stands Mynheer Joe, the hero of Khartoom; he holds an empty wine-glass in his hand, while upon his face can be seen a contemptuous look. His eyes are bent across the table.

Nearly opposite to him is the baron. With a snowy handkerchief he wipes the wine from his face: it has also discolored his shirt-front where blazes wonderful diamond, worth a small

Sandy observes his face and discovers hardly a trace of anger there; infeed, from the sardonic smile one would imagine that this incident is just what the Russian duelist has played for.

Returning the soiled kerchief to his pocket, he cooly tosses his card across the table in the direction of Mynheer Joe.

"You will speedily hear from me, sir," he says, with cutting emphasis. "The sooner the better, baron! Remember, I leave on Saturday's steamer," returns the American, while the officers look astounded; for, brave men though they are, there is not one among them who would care to be in

The Russian bows and leaves the room; he can no longer remain at the table with the man who has thus publicly insulted him, and as Mynheer Joe is the guest of the occasion, it becomes his duty to depart from the mess-table

Sandy is joined by one of the offiers, a fine young fellow, who has aken quite a fancy to the war correpondent. The latter declares it will be his pleasant duty to see Hans Fletcher become a general some day. He has the greatest faith in his dashng qualities.

"Tell us, how did this ugiy affair come about?" he asks, eagerly, for hose at the mess-table appear to have lorgotten it in listening to Joe's glowing story of Gordon's death.

"Willingly-what little I know." replies the British officer. "I was at the other end of the table and failed o distinctly catch the full meaning of the baron's insult."

"Then he brought it on purposely, as I supposed." "We suspect as much, though his reason is not plain. Perhaps you gen-

demen know it?" "The same old story—rivals in love." "Ah! That's the truth of it, eh?" "Was the baron's remark about Miss

Tanner?" "I am glad to say it was not. From the little I heard, I believe it concerned Mynheer Joe's country—some insulting allusion to the flag that cov-

ers our cousins across the water." "Good! And Joe resented it, as any death was a foregone conclusion," says Sandy, hotly.

"But, you see, it's a serious thing to bring on a row at the Colonel's

The officer bites his military mous-

"Really, my dear fellow, you have

de. There would be but one course

for me to pursue, and that to cast his

slur in his teeth, as a brave man like

"Exactly! I knew it! Then blame

him no more, but rather honor his

daring. When this cur had given the

"Every eye was turned on Mynheer

Joe, for we all understood what was

meant. I saw him shut his teeth hard,

but only a slight frown passed over

his bronzed face. Leaning over the

table, he looked the baron full in the

eye and said calmly: 'I return the

compliment, baron. That fing could

gever wave over the land that harbors

1 Siberia!" And quick as a flash he

emptied his wine-glass full into the

Sandy's face glows with enthusiasm.

He is proud of his countryman. A

lew more such men as Mynheer Joe

scattered about the world would cause

s greater respect for the stars and

stripes among the nations of Europe,

He looks at the explorer, and does

not see that Joe is impressed with

the danger into which he has been

"I have great confidence in his abil-

ty, and his lucky star seems in the

ascendant." he remarks, at which

"Privately, between us, Sandy, 1

arnestly hope he will do the baron.

Besides the regard we feel for him

es a cousin from across the water and

the man who avenged Gordon, you

understand that we have no love for

the Russian, whose mission to India

"Yes, and it's my private opinion

It is a good thing to have a san-

that when he runs up against Joe he'll

wish he had taken some other course."

we can suspect."

thus drawn by circumstances.

the officer says in a low tone:

Mynheer Joe has done

nsult-what then?"

other's face."

Dursues Sandy.

tache.

"And a still more serious thing to be publicly insulted there. The Colonel should have seen to it that only gentlemen were invited and not the miserable hound who thinks his title of baron can cover up all his iniquities. The lieutenant glances rather nervously around, hoping no friend of the baron would overhear what is bemen!"

ng said by the flery little correspondent, or there may be a double duel on the tapis. "Honestly, now, lieutenant, if you

had been at the mess-table of a German regiment, an invited and honored guest, and this man should say exactly the same against your flag what [To be Continued.] he did against our stars and stripes. what would have been your action?"

of July aggregated \$3,838,683, a net increase of \$253,892 over July, 1899.

Enable Observers to Detect Presence

of Pearls in Oysters. tion is being paid to the pearl industry of Ceylon, and the government is taking extensive measures to protect the oyster fisheries there, it is of interest to record a discovery recently communicated to the Paris Academy of Sciences by M. Dubois relative to using the Roentgen rays to examine the oysters. It has been found that these rays enable an observer to de termine at once whether a living oys ter contains a pearl or not without injury to the animal, and in case the pearl is small the oyster may be replaced in the bed until further growth takes place and the desired size is reached. In the scientific examination of the pearl oysters in Ceylon it has been ascertained that the popular be lief that the nuclei of pearls are formed by minute grains of sand or other particles holds good in but few instances, and that in most cases the pearls or pearly excrescences are produced by the irritation of boring sponges and burrowing worms. The best germs result from the stimula tion of a parasitic worm which becomes incased and dies .- Harper's Weekly

Woman's Veil Stops Power.

Agricultural.

Mynimer Joe precently excesses himself from the company. They understand his going, and do not wonder at it. Any man who may be called

insect.

spon at sunrise to face the Russian fuelist would be a fool to stupefy his These insects are quite similar in habits and life history. The larvae-develop in beans and peas. The ma-ture beetles of the pea weevil may senses by lingering at a banquet ta-He is immediately joined by Sandy and the pseudo silver king, and the three walk out under the stars to talk. Joe is soon informed with recome forth the same season, but the greater symber remain till the following spring.

gard to all that Mr. Grimes has The three presently bring up at the symnasium, for it is the wish of the atter gentleman that the explorer shall show what he can do, so a comparison may be drawn and a decision

friend, wit Bandy does not de-

other has to face as well as Mr.

Orimon who watched the baren wield

M. He knows what the

rendered as to what Joe's course must be when he receives the challenge ex-A very few persons are present. Mr. Grimes speaks to the man in charge. and they are made welcome as friends of the officers. The same professor with whom the baron played is present, and with pleasure he agrees to ence with the American, no doubt

pelieving he will have a chance to recover his prestige, lost in the bout with the baron that day. When Mynheer Joe takes off his coat and vest and puts a belt around als waist be is ready for the affair. Upon his feet he has drawn a pair of rubber foot-holds that will keep him

He bares his right arm, and Sandy sees the professor glance at his superb bicens as though pleased. Then the man of folls takes his wrist and eels it.

trom slipping.

"A worderful arm, monsieur," he says, with kindling eyes. "With pracice you should be a magnificent

"So old Duval used to tell me," reolies Joe. "Ah, sacre! You take lessons from him, se greatest master in Paris. Per-

haps I shall not be able to have ze revenge after all." Meanwhile Joe rolls up his left shirt sleeve in the same way, an action the professor regards with concern, but which Mr. Grimes takes to mean

what he has fondly hoped. "Ready, professor?" The foils click and begin to writhe ike snakes, passing in and out with the rapidity of thought. Sandy and Mr. Grimes stand near by. They have deeper interest in this engagement

than appears on the surface. After looking on for a minute, Mr. Grimes heaves a sigh of relief.

"He'll do, Sandy. I'll stake my life m him, even against the Russian. Watch that magnificent play of the wrist. Heavens! I've seen a man wield a sword before, but never like hat. Hark! What does he say-that te finds bimself rusty and sluggish. Deuce take it, what can he do when n trim, then? Note the poor profesor. He actually looks scared. His evenge doesn't pan out very well, loes it? I think I'll have to give him a turn myself to make him feel

Thus the usually taciturn Mr. Srimes rattles on, while Sandy can

bardly keep quiet. "Jove! He tosses his weapon into his left hand. Again he is at the proessor like a tiger. The poor devil ans had the button against his heart dozen times. What d'ye think of that left-handed play, old fellow?" aughs Sandy.

His companion squeezes his hand, for once, showing excitement.

"I feel as jolly as if an old uncle had died and left me his fortune. The baron will meet his match. It will be a royal battle. No danger of our Joe getting hurt. Yes, no matter how well he uses the firearms, I shall recommend swords. The other way both may be killed; here, wounds are more possible. Swords are gentlemen's weapons, truly. Look! He hunts the professor-he has him utterly demoralized-be throws down his foil and holds up his hand! Enough, gentle-

It is as Mr. Grimes has said. The Frenchman has been rattled until he can no longer use his weapon. He

laughs good-naturedly. "Monsieur must have his little joke." ile is rusty this night. What of me?" he exclaims, shaking Joe's hand.

The gross postal receipts at fifty of the largest postoffices for the month

FURTHER USE FOR X-RAYS.

At a time when considerable atten-

If the seed is gathered as soon as ripe and subjected to a heat of 145 de-grees the weevil will be killed. Peas that are planted late are free from the

the soil in an orchard becomes hard and packed, soil will lose at least 6000 more pounds of water per day per acre, under the law of capillary attractions, than where the surface is stirred at least every four weeks. Sow a peck of peas to each acre of the orchard, and they will shade the land, loosen the soil and at the same time fertilize the subsoil. The hogs will eat the pea vines and wormy fruit and the land will be getting in better condition. Planting Rhuberb.

Just when the crowns are bursting into leaf is a good time to divide and replant rhubarb. It is the younger clumps that usually produce the finest and most succulent stalks, and some replanting should be done every season. Divisions with one to three crowns attached may be detached from old clumps with the aid of a spade. Replant these in deeply dug. heavily manured ground three feet apart each way, and do not pull from them this season. Bare the surface roots of old clumps, manure heavily, and return the soil to the top.

Cultivate Orehard Land.

Orchards should be cultivated. When

Sweet Corn and Rape.

In many sections sweet corn is grown in large quantities for canning purposes, as well as for marketing in the nenal way.

As a rule, rape in field corn is so shaded that it does not get a good start, but the more open plan of raising sweet corn gives the rape a chance. When properly sown, at the rate of seven to ten pounds per acre broadcast at the last plowing of the corn it will give one a fine crop for pasturing later in the season and not in the least infure the corn crop. It is worth trying on this plan, especially as the seed is not expensive, from twelve to fifteen cents per pound in ten-pound lots of the Dwarf Essex, the only variety wor-

Bedding Material.

thy raising.

As it is an object to make all of the manure possible, the bedding of all animals will be found to aid very materially in the matter. If there is no straw that can be used for bedding, any waste material available can be substituted. Some farmers use large quantities of sawdust, and shavings from the mills are found available. Anything that will absorb the liquid and keep the animals comfortable and clean will answer a good purpose. The hogs will use up and turn into a good fertilizer a large amount of coarse material, and here may be used what would hardly be suitable for cattle or horses, unless run through a cutting machine. Keep these animals well supplied with material and note if lo not give full value for every

thing furnished in this line. Balky Horses. A writer gives the following cure for balky horses: Take a small rope and firmly attach it to the horse's tail. Take a turn on the doubletree or cross bar, giving slack enough to tighten the traces. If the horses refuse to pull tighten this rope until the draft comes on the tail. No horse ever refuses to pull by his tail. When the horse starts the tail-hold may be relaxed until the draft comes on the traces again. Many balking horses will refuse to start, and others will start off all right, but if stopped will refuse to pull. The way to treat this form of vice is to pull on the tail rope until the draft comes partially on the tail. Then he will go. The tail draft may then be gradually relaxed until all the draft rests on the traces. Persist in this treatment and a permanent reformation is a sure re-

Late Plowing. With proper management plowing can be followed until the ground freezes. There are some kinds of soils, particularly of a heavy or cloggy texture, that it is considered better to plow late, thus exposing to the action of the winter frosts. Some farmers like to plant corn on grass land manured in the fall and then plowed as late as possible before planting, in this way turning under a considerable amount of vegetable material along with the manure, thus getting excellent results in the crops grown. This plan makes more spring work, but to a certain extent it may be, and doubtless is, a profitable course to pursue. Farmers should be fully persuaded in their own minds as to these things, and follow the methods that experience proves to be the most satisfactory and profitable for them.

Supplying Water to Plants. It is not easily understood by some that plants can be overwatered. But the fact is, they may be literally drowned, and this often happens.

The position of water in the life workings of a plant is chiefly that of carrier; it is taken up by the roots, carries food to all parts of the plant, and mostly passes off in the atmosphere through the leaves. This routine is necessary; without it growth cannot be made, while a surfeit of water brings decay of the parts in touch with the excess.

The times when overwatering is most possible are when a plant is without In investigating the cause of the leaves, dormant or nearly so, and sudden cutting off of the power on a water cannot be used speedily; when street car at New London, Conn., it the soil is heavy and does not give up was found that a woman's veil had the moisture quickly; when a plant has become so entangled about the trolley been recently transplanted and new so simple and works so well that there wheel as to completely insulate it feeding fibers have not been formed to is no excuse for not putting it in opertake up the moisture, and when ever- ation in every barn,

greens are in question, the leaves of which do not pass the water so readily. House plants may suffer for lack of regular watering if the atmosphere be warm; thorough soaking, but that once is all that is needed, and that the plant can well stand.

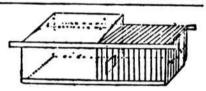
Getting a Stand of Clover.

Although the principal object of growing clover is to increase the nitro gen of the soil, land should be seeded to clover for this purpose long before it approaches a condition of actual poverty. Although the poorest field may be the one most in need of additional nitrogen, it is not the one that will receive most benefit from the cloves crop, as it does not contain humas enough so that a good catch of clover can be expected. The poorest fields should have a good large share of the barnyard manure plowed under, so that they may be ready for clover seed. ing another year. The clover seeding should be confined to lands with a sufficient supply of humus so that a good catch may be obtained. There are sev. eral definite reasons why soils rich in humus give the best clover catch. These soils retain more moisture and in a capillary way. They are in a better physical condition, and plant food is not only plentiful but available.

Suitable preparation of the seed bed is of almost equal importance with humus. The most common practice is to seed clover after grain in ordinary cultivated fields, but the plan only succeeds well on comparatively new land, rich, mellow and crumbly. Ordinary grain fields are rather unfit for the tiny clover seeds. Unless these are scattered on a smooth, well pulverized surface, many will fail to lodge at a depth permitting germination, and many will be covered too deeply. Also a poorly pulverized soil does not permit the rise of the needed capillary moisture. The field should be planked and dragged to a good seed-bed and uniform covering. Rye makes the best nurse crop, as the clover gets the sun the quickest, and the stock should always be kept off the first year.-Prairie Farmer.

Chicken Coop.

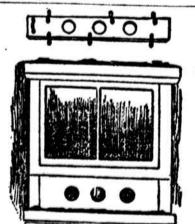
Here is a sketch and description of coop and run for setting hen and chicks. They can roost in it till the hen leaves them. Ends one inch thick or more; make ends first 2 ft., 21/2 in. long, back edges 2 ft., 3 in., front edge 1 ft., 11 in. Front and back should be 1/2 in. thick. Nail box together and nail two pieces on inside of back and front of coop 3x1, on which put a loose floor. Now take two pieces 21/2x1 in., 7 ft. long. Nail one on each side of coop at top edge of front, keep the back one same distance from bottom. Let them overhang 6 in, at each end, to form handles. Put two on bottom 6 ft. long; nail cross pieces same size. between the ends to form the run. Now, cut plasterer's lath in half for end of run and leave a space of 5 in.



to slide a thin board in, another space 21/2 in. to slide a piece in. Space the remainder and nail on. Cover front, back and top with lath or wire netting. Make an opening in end of coop for hen, and cover with a sliding board, from back to front to keep hen in and skunks out. Now make your roof. Let it project 3 in, both ends and front; put leather hinges all the way along the back and shingle the joints keep rain out. To make the above give the best results it needs two pieces in between the rails, thus, X. Then nail the laths on 11/2 in. apart. When you want to confine the chicks in the run put loose laths in between them. When they are big enough to run around take the loose laths out, so they can go in and out at will. Now put a piece 2x1 on each end 12 in. from the floor to put perches on, and put dirt, water, feed and grit in the coop when you set the hen .-- J. Hagley, in The Epitomist

Ventilating Stables. The trouble in ventilating most stables is that the windows are situated directly back of the animals and to open them in the winter means draughts which are likely to be dangerous. The illustration shows a plan for providing ventilation without interfering with the window proper. About two inches over the top of the window three holes are made, each two or more inches in diameter. A frame is built over these holes in which to run a siide, or clips of sheet iron may be placed in position as shown at the lower part of the picture, between which the sliding board may be run. This slide should be wide enough so as to cover the holes thoroughly, and fit snugly, so that when in place no air can come through the

holes. A handle of iron is placed on one end for handling the slide easily. By this method as little air can come in as one



VENTILATION FOR STABLES.

wishes, or one may obtain all that can come in through the three holes by pulling the board out entirely. This ventilating idea is very easy to arrange and the expense is merely nominal. Further, by its use the window may be fastened to remain closed all winter, and any cracks around the casing filled in with paper, for the three holes will provide all the ventilation needed in cool weather. This plan is



N most parts of the West where the public lands were surveyed and laid off into sections, haives and quarters, the public roads have been established on the section lines. These roads consequently run either north and south or east and west, crossing at right angles. This method of locating roads is sometimes called "the checker board system," and the term is quite appropriate. In some States the road laws contemplate the establishing of a road on every section line, so they will be only one mile apart, but not nearly all these roads have been actually opened.

In comparison with the system, or lack of system, which prevails in the older settled States of the East and South, this checker board system has some advantages. The roads are not left to be located at hap-hazard, or on erooked farm boundaries, or according to the whims or selfish interests of the locators. The order and mathematical regularity of the system naturally appeals to the minds of those who read about those roads or study them on maps, but to those who actually travel them, their location appears to be very far short of ideal perfection. In fact the system involves two very grave defects. If a man wishes to travel directly north, south, east or west, these roads take him by the shortest route. But a large majority of the people wish to travel in other directions. Let us suppose a man lives exactly ten miles northwest from his country seat. In order to reach it he must travel seven miles east and seven miles south, or fourteen miles in all. Thus a majority of travelers suffer a hardship in the matter of distance.

But the second defect in the system is far graver. The mathematical precision with which these roads are located carries them across hills and hollows without any regard to economy in the matter of grades. Where the country is perfectly level there is no difficulty; where it is rolling the roads can only be improved at a heavy cost in making cuts and fills; where there are steep hills and deep ravines to cross the system is wholly impracticable.

Doubtless one of the first benefits that will follow the adoption of the national plan will be the modification of this system so as to remedy these defects in a large measure. Naturally the first roads to be improved in a county will be those leading directly north, south, east and west from the county seat. Then main roads or av. clover, etc.-Country Gentleman. enues leading northeast, northwest, southeast and southwest from the county seat should be opened and improved. Thus the first defect shall be largely eliminated

The second defect pointed out can only be cured by departing from the section lines where the lay of the road makes it economical to do so Under national and State aid competent engineers will be employed to correct errors of location, so as to increase the usefulness of the roads, and at the same time reduce their cost.

The sentiment for national aid is making great headway in this part of the country. In Nebraska the Legislature has declared in favor of it. Several members of Congress from Missouri are outspoken advocates o the plan. In Illinois a State Commission has been appointed to investigate and report on national aid. In a number of other States definite action will probably be taken in the near future.

No "Graft!" Congress has no more widely useful

measure of domestic legislation in hand that is contemplated in the bill put forward by Representative Brownlow and Senator Gallinger to give national aid to the good roads movement, The plan is to make a liberal appropriation which will be available for the payment of half the cost of building new roads, the other half to be paid by the State, county or local political division benefited by the improvement. The authors of this design pointed out in addresses to the Automobile Club that the general government, which has spent \$2,000,000 in the Philippines and \$1,500,000 in Porto do something in that line for the American farmer. As \$450,000,000 has been spent on rivers and harbors since to make facilities for land travel also a matter of federal concern.

There is no doubt that the Amerithe stimulus the good roads movement would receive from a federal the tree swaying in the wind. appropriation sharing with the State half the cost of new roadways. There is only one argument against putting perhaps, is to wrap the wound with tno plan quickly into effect, and that is the danger of opening the way to ing wax. The wax is made by boiling extravagance in appropriations and together four parts rosin, two parts "graft" in their expenditure. If the beeswax, one part tallow. To make American people could have assurance this work effective the wound should not to say insurance, against turning not be allowed to become dried out, the plan to the advantage of reckless and no time should be lost in covering legislators and corrupt contractors, the girdled portion. In cases where they would quickly order it carried the injury has not been too severe this out. They want no more river and barbor grabs or public buildings steals in saving trees injured by rabbits. or rural free delivery plunder. There are plenty of arguments against opening the Treasury door to that kind of "graft." But there is no argument with earth for a distance of four or

Public Roads the Veine.

"Go ahead and build your roads," said Stuyvesant Fish, President of the might be protected from injury in this Illinois Central, at the good roads convention in New Orleans the other day, "and we will stand our share of the expenses. The railroads are the arteries of this country, but the public roads are the veins." President Roose highest estate till she has become a velt and forty Governors of States have indorsed the good roads movement.

Shipwreck Victims.

During the last forty-nine years as many as 31,271 persons perished from shipwreck on or near the coasts of the United Kingdom. During the same period the number of lives saved by the Royal National Lifeboat institution totaled 33,900.



TWEET PEA BEDS.

The bed for sweet peas should be prepared as soon as possible, and the peas planted as soon as the ground can be worked in the spring.

FRUIT AND VEGETABLE.

Strawberries, black raspberries and vegetables may be grown in the apple orchard. Care should be taken not to plant such crops too close to the trees. The distance between the outside rows and the trees should be increased as the latter increase in size. The ground should be well fertilized, thoroughly cultivated and every foot utilized, but ample space should be left aroun the trees for root pasturage.

TEMPERATURE OF HOTBEDS.

The temperature of the hotbeds should be below eighty degrees when the seeds are planted. When the seedings are of a size to set out, which will be in about six weeks, the ground should be thoroughly cultivated, so as to kill all the weeds that may be starting. The ground should then be aid off in rows eighteen to twenty nches apart, Onions will stand a great ical of crowding, and some growers out the rows as close as twelve inches and the plants three inches apart in

A VALUABLE ORCHARD.

In Marion County, Pa., is a 140-acre orchard. It contains 6000 apple trees, and many thousand plums and pears, The peaches are set with the apples, and have done their best work by the time the apples need all the room. Mr. Ledy fertilizes well, cultivates persistently, and prunes peaches closely. He says that profit comes from quality, not quantity. An unpruned tree will set from 1200 to 2000 fruits. He does not wish over 200, and fewer are better. Of large varieties, 130 to 160 make a bushel, and a bushel to a tree is enough. This means a small charge for picking, packing and freight, and a big price for fancy quality. Mr. Ledy shipped two and one-half bushels to Philadelphia and received \$4.95 gross. A neighbor shipped twenty bushels the same day to same firm and received \$9 gross. Charges for picking, handling, etc., per bushel were the same. The twenty. bushel lot gare net returns of thirty cents, or one and one-half cents a bushel. The two and one-half cent bushel lot netted \$1.50 a bushel. Mr. Ledy fertilizes with acid phosphate and muriate of potash, 400 pounds rock to 100 pounds muriate. For nitorgen he uses cow peas, crimson

RAKE WILL NOT CLOG.

Among the minor conveniences for the garden worker is the anti-clog rake shown in the accompanying cut. In implements of this character of the ordinary type the grass and other matter scraped up from the lawn invariably clog up the teeth of the rake, so that the operator must stop at frequent intervals for the purpose of



REEPS THE RAKE TEETH CLEAR.

cleaning the rake so that it may be enabled to do the work required of it This difficulty is overcome by the use of the attachment shown in the accompanyin,; cut. This makes quite a valuable addition to the rake when it is used for raking the grass and at such times as it is wanted for other purposes, like turning up the soil as it is frequently in small gardens, 2 bar may be easily removed.

MICE INJURE FRUIT TREES.

The horticultural section of the lowa Experiment Station is in receipt of numerous reports from various sections of the State conveying the information that during the recent period in which the ground was covered with snow, many fruit trees were badly, girdled by field mice. Such trees, if Rico on road building, could properly left unattended, are very likely to die. The majority of them, however, may be saved by covering the injured portion with earth. The growing layer the Civil War, they suggest it is time which lies just beneath the bark will form a new layer of bark if it is kept moist by banking up with earth for two or three inches above the girdled can farmer directly, and the whole portion. The earth should be firmly, people indirectly, would gain much by | tamped about the stem and pains taken to see that it is not separated by

Another effective method of treatment which is more trouble, but surer, broad strips of cloth coated with graft. treatment may also prove effective

In this connection attention is called to the fact that trees may be protected from injury by mice by mounding up five inches on the stem each fail. A large number of young fruit trees are destroyed annually by mice which way.

Women of Slam.

There are no old maids in Siam, for there all the girls marry, and woman mother. Then she has reached the pinnacle of honor. The chief wife is the first wife, and she may not be sold, but if her husband desire to be rid of her he must divorce her according to the law.

Japanese workmen are obliged to wear on their caps and backs an inscription stating their business and their employer's name.