

FROM LADDERMAN TO DEPUTY-CHIEF

STORY OF A FIGHTER OF FIRES—HOW DAN HALE WON THE "THREE TRUMPETS" BY EPES WINTHROP SARGENT

H ALE, look out for Hansen. He says he will 'do' you."

Dan laughed. "I don't think he will get a chance, Captain," he answered. "He's not in this house, and besides the department won't stand for such nonsense."

Dan had been driver of Six truck for nearly a year, having gained the place by beating the water tower to a fire. He sat talking to Captain Franks in the latter's room. Franks took his pipe from his mouth and laid a hand on his shoulder.

"You can't be too careful, lad," he urged. "No private grudge is permitted and a man can't keep his job if he fights, but Hansen is a crafty sort of a fellow and he fears you."

Dan laughed again. "I don't see what Hansen can have against me."

"Simply this. Hansen was the crack driver of the department. Now you are spoken of as often as he is. The crack man usually drives for Chief Corby and Hansen is afraid he will have to go back to a truck or some battalion chief. He won't dare to fight you openly, but he will trick you if he can."

Dan smiled, but nevertheless he looked out for Hansen. "To drive the Chief" was a distinction almost as great as to be an officer. A driver fills the position of a kind of camp to his chief and can do his friends many small favors. Moreover, he goes to fires of importance only and does not have to turn out for every small alarm.

Since he gained renown by forcing his truck between a street-car and a safe truck, Dan had learned much. The series of brilliant feats by which he had gained recognition almost before his probationary period had ended apparently had been interrupted by the last-named accomplishment, though many bits of driving counsel talk in the department.

In reality, experience was teaching him many things besides driving. He learned not to walk upright in a room filled with smoke. He had tried it once, only to drop like a shot. When he recovered, on the sidewalk, Franks stopped to say:

"Don't be so proud next time, Hale. Crawl in. There is always some air near the floor."

The tip had saved Dan's life twice, and was destined to prove his salvation again. They had answered a call to a fire on the water front. A huge warehouse was ablaze, and from the subcellar volumes of pungent smoke leaked up through the gratings. Five alarms had been turned in, bringing out 24 engine companies and six trucks.

Dan had answered with Six on the fifth alarm. He had looked after his horse, and was standing quietly by the truck. Johnson, one of the men, had just gone off with the helmet, after Dan had helped him to adjust it.

The helmet, one of which is carried on each truck, is like a diver's helmet, except that it is not connected around a full suit. Two valves, fitting around the neck, make it airtight. A reservoir in the back

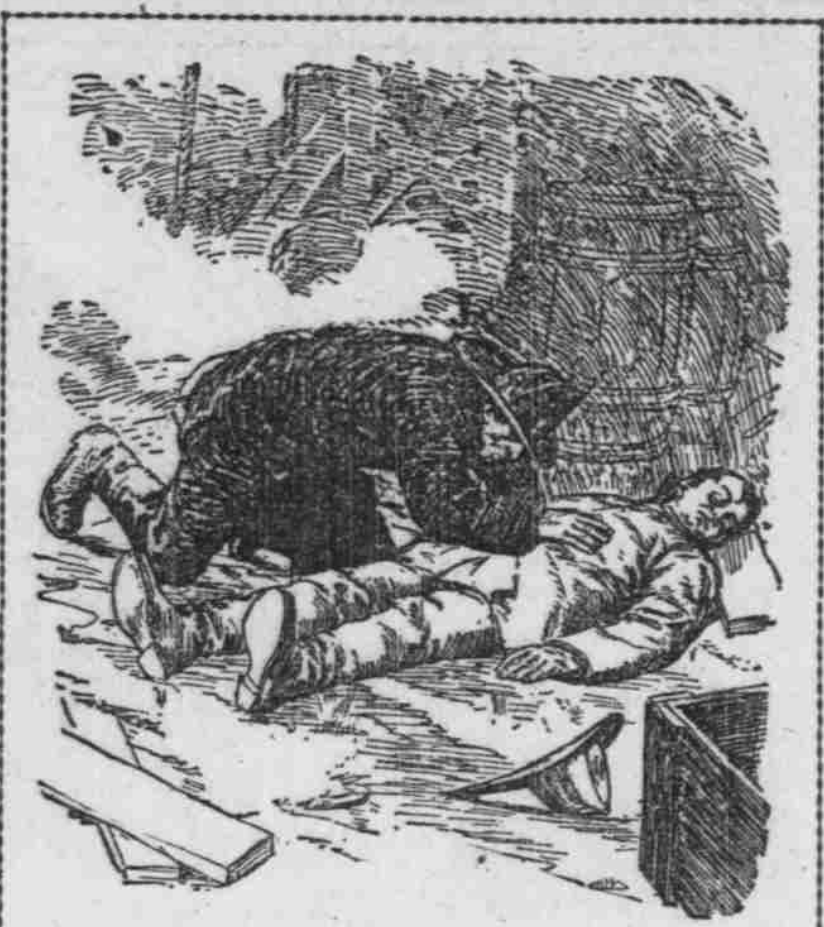
holds air enough for a half-hour, and thus protects the man can enter places where no one could breathe otherwise. Six men, one from each truck, were in the basement with cellar-pipe nozzles, which are sloped like an "L," that they may be lowered through holes cut in the floor. All were located on the River-street side, seeking to flood the subcellar, where blazing varnish was making all the trouble.

Near Dan a dozen ambulance doctors were working over the men who were brought out of the building. Every little while a clanging of the gong would tell that another fireman, too badly hurt to be cared for on the spot, was being rushed off to the nearest hospital.

Hansen came running up.

"Hale," he shouted, "there are some men in the cellar on the Front-street side. Chief Corby says go get 'em. There's a short of men, and you're a star fire-saver."

The order was unusual for drivers as



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seemed called on, but Hansen drove for Corby and Dan promptly obeyed. Fastening a belt around his waist, he started for the rear of the building.

Hansen, white with fear, looked about to see that he had not been observed and hurried back to the chief's buggy. No such order had been issued, but men were dropping all around him and he saw a good chance to rid himself of Hale.

Dan saw no trace of trouble when he got around to Front street. The fire was on the River-street side of the building. The lines of hose were run there and on Jones and Sandhurst streets.

No one saw him go down the ladder through the gratings or drop down on a freight elevator that had been anchored on the first level. The place was so full of smoke that he could barely breathe, even with the gratings just above him. The pungent smoke of the blazing varnish made his eyes water till he could scarcely see. Once he started to turn back, but Hansen had said that there

been in the ink bottle as plain to these queer employees as if the addresses were written in the finest copper plate. Sometimes ingenious persons write addresses on envelopes in ways especially designed to puzzle the experts, but they do not often succeed. Foreigners often write addresses that ordinary persons would give up immediately as utterly hopeless. But Uncle Sam's riddle seldom rarely fails to find out where the letters should go.

Another unusual occupation that can be entered only by going into Uncle Sam's employ is that of looking for wrecks and other floating dangers on the high seas and blowing them up. For many years shipmasters complained of the many half-sunken wrecks that floated around in all the seas of the world, and threatened navigation. But little or nothing was done about it, probably because it was everybody's business, and, therefore, nobody's. The wrecks were in the open sea, and therefore under no nation's jurisdiction. So they all

looked toward each other to do something instead of pitching in.

But finally Uncle Sam and Uncle John Bull got tired of doing nothing, and they fitted out warships to cruise the wrecks. These ships got all the logs of incoming vessels which report having sighted any wreckage that looks like a menace to navigation, and then they steer out to the latitude and longitude mentioned in the log. If it is an abandoned ship that is not worth salvaging, the cruiser lies off and fires explosive shells into it until it sinks completely. If it is a waterlogged wreck that cannot readily be sunk by gunfire, boat parties are sent to it to blow it up with dynamite, or to saturate it with kerosene and set fire to it.

Many wrecks that had become famous because they had drifted so many years have been destroyed since the work started. And many a ship is sailing strong and beautiful today that would be lying shattered and split on the ocean bottom from striking one of these walking sea-terrors. If it were not for Uncle Sam's wreck breakers.

J. W. M.

ACROSS SIBERIA BY RAIL

NEW TIMETABLE FROM PORT ARTHUR TO ST. PETERSBURG

"Daily trains from Vladivostok, Dairen, Port Arthur or Niuchwang for St. Petersburg, all rail route except 27 miles across Lake Baikal," reads the newest timetable of the Siberian Railroad. "Trains from Peking and Tientsin make close daily connections with trains for St. Petersburg at Niuchwang. Time, two days from Peking to Niuchwang."

These words would have read like a story book only a few years ago. Nobody a generation ago would have believed that before the 20th century was two years old, three fast trains a week would be running between far-off Irkutsk and St. Petersburg, and not merely ordinary trains, but elegant ones, with dining-cars, baths, barber shop and library.

That they are well patronized is shown by a note in the time-table warning travelers to engage compartments or seats on the train in advance. First-class fares from Irkutsk to St. Pe-

tersburg are only \$2.57. The sleeper costs \$1.60 for the journey. By traveling second-class, one can make the trip, sleeper included, for \$4.15.

The trip made in fairly regular time. Travelers from London have arrived in Niuchwang within 30 days.

A truly Russian characteristic is to be noted in the fact that with all the luxury of the through trains, travelers are advised that they must furnish their own soap, blankets and pillows.

A Preventive of Selfishness.

A large family of brothers and sisters is a sovereign panacea for selfishness. If for no other reason than this, the modern American aversion to a plurality of olive plants in the home nursery is hurtful to the race. An only child is a lonely child. That goes without saying. It is almost as surely true that he is a selfish creature.

The very love which is his daily food becomes bane in his system, for it fosters self-esteem. His parents' hearts are bound up in him. He is the center about which revolve all their hopes and their ambitions. He would be more than human if, in the ignorant ignorance of youth, he did not assume and believe so certain that his small personality must be of supreme consequence.

A significant Irish superstition asserts, "The cake unshared is the cake of the sick." When the cake is divided into four pieces it is twice as wholesome as when halved.

Have I never told a pretty incident that fell under my own eye of the 5-year-old boy whose 8-year-old brother was ordered by the doctor to take the unsugared juice of half a lemon mixed with water every morning as a preventive of malaria?

The boys were exactly the same height and there was but half a pound's difference in their weight. The happy mother often laughed and said, "I wonder how they were never apart, day or night. They never said 'I' or 'mine.' It was always 'we' and 'ours.'"

Finally, unable to bear it any longer, he put out a chubby hand:

"Mamma, let me take the rest of it for him!"

This was a clean "obliteration of selfishness," a method of God's very own and hallowed appointment.

Monograms for Table Napkins.

Harper's Bazar.

In the Autumn showing of table napkins the liking for a center monogram is emphasized. In many of the most beautiful and expensive weaves the initial or shield shape is wrought in the pattern directly in the center of the napkin. In this the letter, crest or other device is embroidered. The napkin is folded crosswise in three, and afterward under at each side to leave the framed monogram in the center of the final square.

BROTHER COON TALKS TO UNCLE DOG

TELLS WHAT HE EATS, WHERE HE LIVES AND HOW HE CLIMBS AND FIGHTS • ANOTHER NATURE STUDY

"A S I was taking a stroll around tonight I thought I'd drop in on you," began the coon, as he found the dog sitting at the door of his kennel. "It won't do you any good to rush at me, for I can outrun you, and as for a fight, I'm not a bit afraid of you."

"Well, what have you got to say?" replied the dog, after barking at a tramp who was passing along the highway.

"What do you know about coons?"

"Not much, except that they are fond of new corn."

"Then I'll tell you a few things. The coon is the best climber in the forest. He cannot ascend in pretty quick time. About the only enemy he has is man, and man seeks him for his pelt. If the coon made his home in a hollow log or a burrow, it would be easy for a man to find him; but he is too sharp for that. His home is always in the hollow of a tree, and sometimes 50 feet above the ground."

"But the hunter can catch him when he comes down," said the dog.

"If he does he's got to be very sharp," replied the coon. "I never leave my home in the daytime, and before I come down I look and listen until I am sure no one is about. Then I descend so softly that no one 10 feet away could hear me. I've got a keen nose, and if a man were about I should get the scent at once. He sometimes sets traps for me at the foot of the tree, but I am too cute to blunder into them. Sometimes I walk out on a limb and come down by another tree."

"And what do you eat?"

"A great many more things than you

do. About all you get is the bones from the farmer's table, while I have fish, oysters, clams, crabs, fowl, berries, bark and roots. I don't kill chickens, but if I find a dead one I eat him. I am no fisherman, but when I find one on the shore he's my meat. As for oysters and clams, I get them at the edge of the water and crack their shells in my teeth, and the crab I get hold of never gets away. In the woods I can find a dozen different roots I like, and when berries are ripe I eat my fill of them. If the snow is too deep for me to get about, I satisfy my hunger with the bark of young trees. You'd have more fat on your ribs if you were a coon."

"How about your eating corn?" asked the dog, as he licked his chops and felt hungry.

"Well, there is just one season when I eat corn. It is when the ears begin to glaze, and the kernels are full of sweet juice. That is also the season when the farmer roasts them. I can then go out and eat half a dozen ears, and he wouldn't notice. I am corn then than oysters. That is also the time when the farmer's boys hunt me with dogs, as perhaps you know."

"Yes, I have hunted coons," said the dog, but he never ever caught one. You are too big to run fast. The coon hears the men and dogs whiff they are yet a long way off, and away he goes for his tree. If there is a swift dog among them he may come up with me, and in that case there is a fight. I turn on my back, and as he jumps in I use my teeth and claws in a way to make him ill. In about two minutes he is ready to let go."

"When the men come up they set him

on my track, and he follows me to my tree. It is always a big tree, and if they spend two or three hours cutting it down I am ready for the fall. I wait till the last minute and then jump for another tree, but even if I fall to the ground I have a good chance of fighting the dogs off and getting away."

"And how about your fur?" asked the dog.

"It is not so valuable as that of the fox or mink, but it sells for a good price nevertheless. It is made into overcoats, caps, rugs, capes, muffs and gloves, and it is often dyed to other colors and sold for what it is not. Now that I think of it I can give you a bit of news."

"There is a man in Michigan who has started a coon farm, and is going to raise coons for their fur. He has got 20 coons to start with, and after a few years he thinks he can sell 50 skins a year. Queer business, isn't it? He may make a success of it, but I think these coons will all get out some night and run for the woods, and when he gets up in the morning he won't find a ring-tail left. Good night to you, Mr. Dog. I'm off for something to eat and a good long sleep."

"But look here," said the dog, as he got up and shook himself. "I'm here to watch for coons as well as other animals, and I can't let you go. I'm going to make a prisoner of you."

"Right away!" laughed the coon. "Yes, right away. Here goes!"

The coon made a dash for the door, but the latter dodged him and took to his heels, and as he went through a hole in the fence and gained the cornfield he called back:

"Sorry for you, Mr. Dog, but your legs are not half long enough!"

PLANTS THAT CATCH AND EAT INSECTS

TRUE CARNIVOROUS THINGS THAT FEED ON ANIMAL FOOD

PLANTS really are living beings, the same as animals, and, like the latter, they are obliged to absorb nourishment to develop them and to remain alive. But since they cannot, as do the beings of superior species, go in search of this nourishment, most of them depend on their leaves to draw moisture from the air and the roots to absorb food from the earth.

Some, however, do not content them-

selves with the food obtained in this way from the air and earth. They vary their diet with a little animal food. The most remarkable of these carnivorous or animal-eating plants is the Venus flytrap, which is common in North Carolina. All its leaves radiate from the root and form a myriad of rosettes. A strong vein extends from the base to the summit, and their edges are furnished with stiff, spiny hairs.

Each half of the leaf presents a slight concave surface strewn with glands.

These glands distill a liquor which attracts insects. The stiff hairs on the edges are placed in such a manner that the insect which hovers near the leaf is almost certain before long to touch one of the hairs. And as these are endowed with a great irritability, when they are touched the two lobes of the leaf close quickly, one shutting against the other, and they interlace their spiny lashes so firmly that the prey which they have seized cannot escape. So long as the insect struggles,

a movement. It is only when an insect touches them that they close up.

Another plant, the *Darlingtonia*, feeds on insects, but in a different way. Its leaves form a species of urn, which ordinarily holds some water. On the inside there is also some honey, which attracts the insects. These unhappy animals slip at the smooth incline, fall to the bottom and cannot get up again, for there are sharp hairs that are directed from the top toward the bottom to prevent them.

Little by little the plant absorbs them, just as does the Venus. But it has an advantage over the latter. It can save its food if it does not wish to eat it at once. Its urn is a larger in which it can keep its provisions up, forming a beautiful reserve on which it may draw when it is hungry.

If the provision is too abundant for its consumption, the dead insects give birth to a great quantity of larvae, which grow and develop quickly in this leafy medium and offer for the appetite of the greedy *Darlingtonia*, a choice food—tender, fresh and unceasingly renewable.

Another plant is the *Serpentaria*, whose large funnel-shaped flower exhales an insupportable deadly odor which attracts flies from a distance. They precipitate themselves to the bottom of the tube of the flower which secretes the sickening juice and die there. Then the *Serpentaria*, like the Venus, absorbs and devours them.

Lizard in Literature.

London Express.

In his great narrative poem, "Enoch Arden," Tennyson describes the shipwrecked mariner on his lonely life sitting so still in his long wait for a sail that "the golden lizard on him paused." I have often wondered how Tennyson got that idea, and whether he was justified in it. Do lizards ever run up onto human beings and wait there for their insect prey? Emily Bronte represents the sinister hero of "Wuthering Heights" as standing still so long in his agony and coming to look so unlike a human being that a building thrush, if I remember rightly, is seen to perch upon him. But a lizard seems even less likely in this connection than a bird. However, as we eat lunching on a sunny bank the other day my companion suddenly gave a little scream and cried: "Oh, what curious thing is on your arm?" I looked down, and there was a common lizard, with its head oddly twisted on one side, looking at me. I turned my little visitor, which darted over my shoulder and in an instant or two had disappeared in the tangle of the white-throated hawthorn; but not before I had seen and admired its bright eye and its green coat.



The Darlingtonia.



Venus Fly Trap.

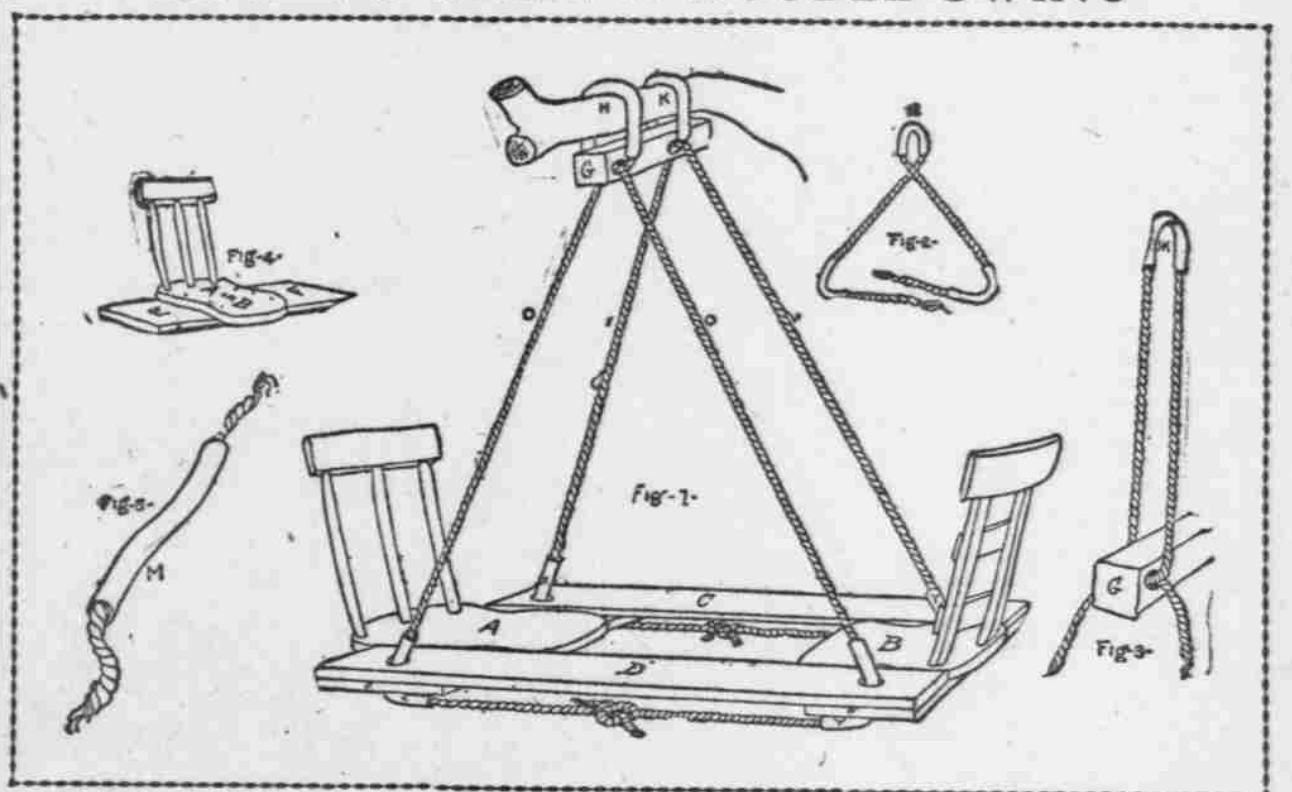
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Each half of the leaf presents a slight concave surface strewn with glands.

In France there is a plant found frequently in marshy places which is named *Rorippa*. It has the same properties as the Venus. Its leaves are covered with thick hairs, the transparent glands of which resemble small drops of dew. They close up if an insect touches them, but if a bit of mineral substance is placed on them, neither the leaves nor hairs make

move. As soon as it ceases to move the lobes open lightly. The leaf secretes a digestive juice similar to the gastric juice of the human stomach, and the prey is slowly dissolved and absorbed.

HOW TO MAKE A DOUBLE SWING



I N getting ready to make the swing set, the best thing to do first is to study Fig. 1 in this picture. It shows the swing complete, and when its details have been mastered the steps told here will be perfectly clear.

To begin get two old wooden chairs of the common kind used in kitchens. Saw the legs off neatly, so that the bottom of the seats will be entirely smooth.

Then get two strong boards of good wood about 12 inches wide and at least one inch thick. The length of these boards must be such that each one will project 12 inches on either side of the chairs fastened to them on the floor, the proper distance apart, and lay the long boards, C and D, over the ends of the short boards, E and F, Fig. 4.

Screw the chairs together with the largest screws that you can handle. If possible, bolt them instead of screwing them. Boys

do not use bolts often enough for their work. They are quite as easy to put in as screws, and they not only make a much firmer job, but also one that is far neater.

Whether bolts or screws are used, enough must be put in to assure complete rigidity. If only one is used at each corner, the entire frame will have a constant liability to give sideways.

Now you have your framework complete. The next step is to bore holes for ropes. These must be just thick enough to fill the diameter of the hole. First pass the end of a rope through the hole near E, having first inserted the bit of hose to guard it from the wood. Draw the rope through until only enough remains of the loose end to reach to the middle of D, as shown in Fig. 1. Draw the rope O into the hole into the stay block. When it emerges draw it through a section of rubber tube long enough to reach around a post or branch as thick as the one shown as H and K in Fig. 1.

Then the rope passes back again through the hole in the stay block, down to the frame, through the hole opposite the one where it entered, and then the two ends are knotted firmly together underneath. Fig. 2 shows how the ropes are to be drawn through the frame and the stay block.

Fig. 3 shows a method of making a swing that looks more graceful. It is made by merely making a long loop above the stay block instead of the short one shown in Fig. 1.

Fig. 5 shows how the rope passes through the hose M.

it just as into the frame. Its dimensions are four feet long by four inches square, and the holes are four inches from the end. Fig. 2 shows the direction in which the ropes must be passed through the frame up to and through the stay block and the loop that they form above it.

Two ropes of exactly equal length must be used. They must be just thick enough to fill the diameter of the hole. First pass the end of a rope through the hole near E, having first inserted the bit of hose to guard it from the wood. Draw the rope through until only enough remains of the loose end to reach to the middle of D, as shown in Fig. 1. Draw the rope O into the hole into the stay block. When it emerges draw it through a section of rubber tube long enough to reach around a post or branch as thick as the one shown as H and K in Fig. 1.

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UNCLE SAM'S QUEER OCCUPATIONS

HOW HE ONCE HIRED RAINMAKERS • MEN WHO WATCH AND STUDY FORESTS

THERE is hardly any kind of labor or knowledge that Uncle Sam cannot use. Possibly there is not a single profession or occupation in the United States that has not at least one representative who is in the employ of the United States Government.

Of course you all know that he has lots of doctors and lawyers and bankers in his service. The doctors are in the Army and the Navy, in his revenue and immigration service and scattered through all his various departments. Thousands of them are drawing his pay from the Polar Seas to the Philippines.

His lawyers are represented almost everywhere, too. Many of them are in the Philippines, and they must be good ones, for they have important questions to answer. A mistake might not only cost Uncle Sam a great deal of money, but involve him in deep trouble with other nations. The lawyers who are in Uncle Sam's employ in Washington have to be sharp men, for there are many extremely shrewd and clever lawyers in Congress who would be quick enough, you may be sure, to catch Uncle Sam napping.

Uncle Sam's bankers are scattered everywhere, like his lawyers and doctors. Some of them sit in places called sub-treasuries. Others are here and there under all kinds of titles. Some good ones have been working lately in the new possessions, trying to put affairs there in order. They had to know all about the currencies of various countries and just how much actual money the dependencies could raise at a pinch and how to provide against recklessness and extravagance and unexpected misfortunes.

Uncle Sam has lots of bookkeepers, of course. He employs an army of errand boys. He has thousands of stenographers. He has porters and shipping clerks and all the other helpers needed by great business concerns.

In his printing shops he has every grade of help from the printer's devil, who is the boy that runs around with copy for the compositor, to high-grade lithographers and color artists.

He has hundreds of literary men in his employ. Some famous artists have been glad to paint pictures for him. They have painted his fish and his frame and his forests and his Indians. Their work has been reproduced by Uncle Sam in beautiful books that would cost many dollars a copy if they had not been printed by the Government for distribution among citizens.

Beside the well-known occupations, Uncle Sam provides many men who are not known in ordinary commercial life.

For instance, he has a small army of foresters—men who go all over his country year in year out, studying his forests. This is a comparatively new business, but it is going to be a most important one for the United States, for the forests are vital to the life of the land. Because of the forests, such as the Adirondack, the Allegheny, the Catskills, has been almost the rule through generations, would mean floods and droughts without cessation in the end. The trees are great balancers. The woods are like immense reservoirs. Without them there would be no little streams, but instead the waters that gather from the rains would rush down the barren hillsides in torrents and drown the cities at their bases. In hot, dry weather there would be no moisture seeping down through the earth as there is now when the woods preserve it.

And then, too, if we keep on chopping down all our trees, there will come a time when no more wood is to be had, and that would mean ruin for nearly every industry, for, although men call this the age of steel, yet if you will look around you you will find that almost every other thing that you see has some part in it of wood.

Uncle Sam's foresters have learned all about trees—how long they live, how they should be treated, how many may be cut each year in a forest without harm, and what trees are the best ones to plant in certain places for certain purposes.

Many of Uncle Sam's foresters studied



D.O.F.