EXAMINING MEN FOR FOREST RANGERS

APPLICANTS MUST SHOW THEY CAN RIDE, PACK A HORSE, AND KNOW CONSIDERABLE ABOUT SURVEYING

LINEUP OF FOREST RANGER CANDIDATES AT DENVER

NO TWO OF THE CANDIDATES PACK A HORSE THE SAME WAY

Your Uncle Sam he says to me, "I want a man to ride,
To pack a hoss, and shoot a few, and sleep outdoors beside;"
So I signed with him as a ranger bold, to ride the forests free,
But Lord! you ought to see the stunts your Uncle Sam gave me.
It's law in the mornin', science at night,
Study all day, and figger and write;
He gets high-browed work on a high-browed plan,
Does the Government's handy man.

THE above lines pretty well describe the feelings of the ambitious young man who takes Uncle Sam's annual examination for the position of forest ranger. The old-fashioned notion that a forester is a lucky individual whose only work is to rest "under the greenwood tree," and occasionally arrest some tenderfoot who has let a campfire spread, is being fast dispelled, for there are few positions in the Government service that call for more varied qualifications than the forest ranger finds demanded of him.

When the forest service was begun, under the administration of President Cleveland, the duties of the forest guards were comparatively simple. Since then their work has become more complex every year, and eventually only men who are specially trained will be able to assume the ranger's duties. Annual examinations for forest ranger positions are held in the various states containing the great National forests. Many hundreds of men ambitious to enter the forest service are examined as to their qualifications, and selections are made strictly under civil service rules. The first day of an examination is spent in indoor work. The applicants are given questions dealing with problems confronting one in the forest service and bringing out each man's educational fitness. This examination, while not particularly rigorous, bars the totally uneducated from the ranks of the Government's foresters.

The second day of the examination is devoted to field tests, and it is here that the applicant must demonstrate his ability along practical lines. He must show some knowledge of the surveyor's compass, and is required to pace off a half mile or so in a triangle, and then reduce the distance to rods and feet. Then he must satisfy the Government officials who conduct the examination that he knows something of the art of packing a horse. For that packing is an art is well known by any man who has had actual experience away from the haunts of civilization in the West. The man who takes to the trail without some previous knowledge of packing will soon find that he is helpless as an infant, and the best thing he can do is to put back to town and hire a guide.

At a forest ranger examination held in Denver a few days ago, the applicants, some 26 in number, spent most of the day packing and unpacking two patient horses. Each man was required to put on the pack-saddle, which is an apparatus looking not unlike a "sawbuck," and on the horns of which a skilled packer can load an enormous quantity of camp stuff.

SUPERVISOR FITZGERALD, OF THE PIKE'S PEAK NATIONAL FOREST, EXAMINING A CANDIDATE IN THE USE OF THE COMPASS

No two men among the entire 26 went at the task of packing in the same manner. The Goernment, however, is not particular as to the style of packing, if only some recognized hitch is used and the pack will bear the inspection of the skilled rangers who conduct the examinations, and who know whether the load will stand much travel along a rough trail without being shaken to pieces. The applicant is required to pack a tent, his own bed, which consists of blankets and a tarpaulin, cooking utensils and "chuck" for a week's use. There is also the inevitable ax, which is the forest ranger's insignia. Some of the applicants at Denver proved very deft and soon had a neat-looking pack on the horse's back, fastened with the diamond hitch, or with some other hitch that is recognized by the trail men. Others plainly had no experience in this line of work and their packs provoked a smile even from the examining officials, who are always careful not to criticize, much less to aid any applicant in his work. While each man was packing, the rest of the applicants were required to take themselves away where they could not disturb the man who was being examined by making any comments and "rattling" him at his work.

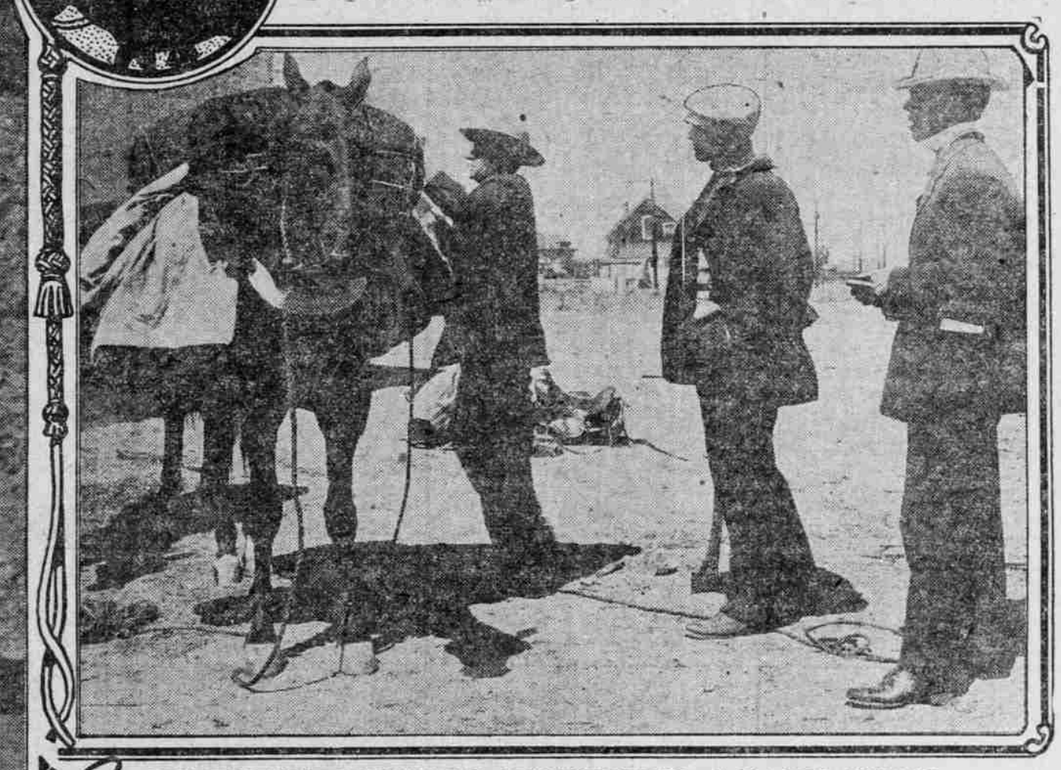
After the applicants have taken their examination they are notified by mail of the average they have made and the fortunate ones who are elected to fill vacancies are told to report and don the uniform of Uncle Sam's new service. The examination at Denver was conducted by Supervisor Fitzgerald, of the great Pike's Peak National forest, and Deputy Morrill and Forest Ranger Sobey, of the same reserve. All these men are veterans of the service and were quick to size up the relative merits of the applicants.

As a general rule the man who makes the best showing in the outdoor work and who demonstrates that he is familiar with the details of life in the open is the man who is assured of a berth in the forest service. For this reason, men who have seen service as cowboys are particularly desired and the forest service contains many ex-cowpunchers who are doing brilliant work in their new calling. Forester Gifford Pinchot recently declared that in the wars of the future the Government of the United States will have to depend for scouts upon the rangers of the forest service, a prediction that seems reasonable in view of the fact that the rapid settling up of the open range has practically wiped out the cowboy and leaves only the forest ranger in the saddle.

After the applicant has been accepted and enters the forest service, he finds that his examination has only begun. He must familiarize himself with the Use Book, a veritable encyclopedia of forestry information published by the Government, and which is called the "forester's Bible." He must study practical forestry from all sides; must know the commercial value of trees and how to use to the fullest extent the timber supply of a reserve. He must know how to scale timber in order to supervise the working of sawmills within the National forests and must be an expert in forest planting, in order to aid in the work of reforestration, which the Government is carrying out. He must know the character and value of lands and be able to determine if mineral claims or agricultural claims within the reserve are being made in good faith or merely to get possession of valuable timber. He must acquaint himself with grazing restrictions and know how many sheep or cattle a certain area will support. If the range within the reserve is being overstocked, he must see that the offending stockmen cut down the sheep or cattle grazing therein. He must know something of the legal side of forest matters and must be ready at all times to fight forest fires, the greatest menace of the National forest. Protection of wild game under the laws of the state in which his National forest is located also comes within the ranger's province, and he must keep a watchful eye on campers and see that the regulations of the forest are complied with.

The restrictions of the public range, owing to its rapid settlement in recent years, has crowded much livestock on the forest reserves. The Government has found it necessary to impose restrictions, or the reserves would soon be overstocked. The cutting of timber has also grown to be a big problem in which the forest ranger is actively concerned. It is the Government's purpose to encourage all the cutting of timber that can be done without wasting the natural resources of the National forests. The ranger must mark every stump that is to be cut and must see that the cutting is done scientifically and in a manner that will benefit the forest growth. Too thick a forest stunts the growth of the trees and it is the aim of the forest service to strike a happy medium.

In spite of all the details of the work, those who are engaged in it find it fascinating. There are hardships in plenty, but the service has its rewards in the shape of excellent positions as supervisors and inspectors, which pay large salaries. Applicants for forest ranger positions are increasing every year, showing how keenly the young men of the Nation are interested in this new profession.



FORESTRY OFFICIALS INSPECTING A PACK BEING ADJUSTED BY A CANDIDATE

Sparing the Eyes of the Public School Pupils

New York City Proposes Eleven Reforms for Easing the Strain to Which They Are Subjected.

THE average life of a public school text book is two years. With few exceptions at the end of two full school terms new books replace those in use. It was this circumstance which encouraged the Association of Women Principals of New York City Public Schools to believe that all the suggestions formulated at a conference between its committee on children's welfare and an advisory board of 12 oculists, which was held about five weeks ago in the DeWitt Clinton High School would be adopted promptly by the Board of Education.

One reason for holding the conference was the discovery that the percentage of pupils with defective vision is higher now—nearly 40 per cent higher—than it was ten years ago, when for the first time a systematic examination of the eyes of school children was begun by the late Dr. Agnew. It was proposed to study the remediable causes of eye strain in present school conditions, and before the conference ended 11 suggestions were made and unanimously adopted.

Up to that point it was smooth sailing enough, but to incite the Board of Education to action has proved harder. From the welfare committee's standpoint to adopt the suggestions would be as easy as it was to adopt the new course of study that began in 1906.

"At that time," said the chairman of the committee, 'the publishers met the demand for new books instantly. Similarly, should the Board of Education now say to the publishers, 'We don't want any more shiny paper and we do want outline drawings substituted for halftones; we want the length of line in school books to be hereafter from a minimum of 2¼ inches to a maximum of 3 inches and the space between lines to be not less than three millimeters,' that would settle it. The publishers would, I believe, go to work and give us what we want.

"Statistics now show that in Germany about 95 per cent of the higher class students suffer from defective eyesight and this is attributed to the fine, close print of most German text books. In our schools about 60 per cent of the children have defective vision, 40 per cent of these being in the higher classes. I believe this percentage could be lowered by a change of text books."

One of the suggestions made at the conference advocated movable chairs in the classrooms, so that children with poor sight may sit where the light is best and at the same time in chairs that fit them. As now placed the stationary seats are graded in size, the smallest in the front, the tallest in the rear, and if to get a better light a tall girl moves toward the front of the room she must sit in a chair too small for her or if a small girl moves toward the rear she must sit in a chair that is much too high for her.

Loose seats, says the chairman, are entirely feasible, and she hopes that they will be a forerunner of the modern classroom. Suggestion No. 8 recommends that during the first two years of school life all writing shall be done on a blackboard. A sketch of a model class designed by this principal shows a double row of blackboards along two sides of the room, about three feet apart. The inner blackboard is at the usual height from the floor. The outer or wall blackboard surmounts a platform raised high enough to permit a teacher to see both boards from her seat.

When the chairman was asked, "Is it latter day school equipment that is mostly to blame for the increase in the number of cases of defective vision among the young?" she answered:

"By no means. The schools' equipment may certainly be improved; on the other hand it is now much better than in the early days of elementary public schools. The trouble is that up to within 50 or so years human beings were trained mostly for far sight.

"Half a century ago the number of persons in New York who could neither read nor write was comparatively large. Before the compulsory education law was passed there was not nearly so much eye strain for the reason that children did not use their eyes so constantly.

"At that time the community depended largely on signs. Street cars were painted different colors, each color denoting a particular route. No need to do any reading of window billboards and top signs. Nowadays one must do a lot of streetcar reading or else get fined."

"Fined?"

"Why, yes. Fined. Many a time I have had to pay an extra five cents because I failed to read the notice pasted up in the car about no transfers given unless asked for when a passenger pays his fare. Unless they want to pay double fare nassengers have got to do a lot of reading in the cars these days.

"In the old days cigar stores were denoted by a wooden Indian outside the door; barbers used a striped pole for a sign; taverns had a bull's head or a boar's head over the front door; glove shops hung out a huge gold glove where every passerby couldn't help but see it—and so on. No searching for indistinct numbers and closely printed signs was then necessary.

"With the arrival of the compulsory education bill short sight was forced upon the people and the willy nilly generation after generation has had to keep its eyes more or less on books for several consecutive years at least. To make these books therefore as little trying to the eyes of adolescence as possible is manifestly the duty of school boards everywhere."

Abraham Stern, chairman of the committee on special schools, was asked what action the Board of Education was likely to take regarding the suggestions for the relief of eye strain. He answered that his committee, as well as several other committees, had given the suggestions careful attention and that several of them could be and probably would be adopted at once; for instance suggestion No. 11, made as a result of a tour of evening schools. It asks that "electric bulbs used in class rooms be made of frosted glass and that clusters of such bulbs be screened with pale amber shades."

Suggestions 9 and 10, which ask "that all rooms in which artificial light is burned continually be closed" and "that no part time classes be permitted to occupy any room in which the light is not entirely satisfactory," are also indorsed heartily by the school board.

"In the modern school buildings there are no dark rooms," said Mr. Stern, "and in the oldest buildings we have been endeavoring for several years past to shut up as far as possible dimly lighted rooms, of which there are some.

"The problem of finding school accommodations for half a million children has held us back from discarding class rooms which, when compared with those in the newest buildings, cannot be called brilliantly lighted. Before long we hope to see better buildings replace some of these older schools.

Suggestions 5 and 6, which read respectively: "That in reading the children hold their books at an angle of 45 degrees and in oral reading be required to look up frequently," and "That after a lesson demanding close work the pupils be asked to look up at the ceiling and out of the window to change the focus of their eyes and rest the muscles of accommodation," are approved by the board, and doubtless every teacher will be glad to follow them. It was said, without a special mandate to that effect from the Board of Education. But this, it seems, is about as far as the Board of Education, or rather the different committees mentioned, have got.

Suggestions 1, 2, 3, 4, 7 and 8 have not to date made much headway. No. 1 refers to the non-use of shiny paper in text books. No. 2 wants outline pictures substituted for halftones. No. 3 refers to the length of lines, No. 4 to the space between the lines, No. 7 wants loose chairs, etc.

Whether in the near future any of these will reach the status of a by-law is problematical. Mr. Stern himself is far from optimistic on this point. For example, in the case of spacing the text, roughly speaking, three millimeters is equivalent to almost one-sixteenth of an inch.

"I am told by printers," Mr. Stern declared, "that to print school books with three millimeter spaces between the lines and use the same type as now would make the books so enormous that the average child couldn't carry them. They may be wrong. I haven't figured out the question for myself, but I am inclined to think the printers know.

"Then as to halftones and shiny paper. It is possible that a change to dull finish paper and outline drawings might be a good thing in some cases. I have talked with oculists, though, who attach little or no importance to this feature.

"With the Board of Education the question must always be, Will this or that outlay of money be justified by the good accomplished? To make new plates for all the school books and rearrange the style of make-up would cost us at least half a million of dollars, it is estimated—a big sum to use without being certain that the good results would justify it. For the present at least I do not believe the make-up of the school books will be changed."

"How about equipping classrooms with movable chairs?" Mr. Stern was asked.

"Out of the question at present. There are 600 school buildings in Greater New York with an average of 25 classrooms each and and an average of 25 pupils in each classroom. Or to put it in round numbers, there are now about 500,000 children attending the public schools. To take away the fixed double seats and substitute new chairs would cost at least $2 a head, or something like $1,000,000 for the outfit. This is not a fancy estimate at all. It is an estimate based on serious and close calculation.

"No one appreciates more than I do the advisability of doing everything possible to relieve school children of eye strain. It is deplorable to see so many young persons wearing glasses and still more deplorable to find that so many children are careless about wearing glasses after they are provided. As a general thing every chance a child gets off come the glasses.

"But the Board of Education is constantly facing problems, and its first care and the best it can do is to attend to the most serious of them first. One of the most serious just now is how to give schooling to blind children.

"In this respect Chicago and Milwaukee got ahead of New York by providing a place for them in the public schools, and it is now up to New York to do the same thing, although this, like every other new departure, means a big expenditure of money. There can be no two opinions, though, about the advisability, the necessity, in fact, of this expenditure.

"Our plans are completed, I may say, and when the public schools open in September we shall enroll at least 50 blind children and a few special teachers. Just what schools these children will attend is not yet decided.

"We shall use the Braille system. Until blind pupils learn to read and write, which will take about two years, they will be kept in a class by themselves and after that put in the regular classes. At no time will there be more than ten blind children put in any one of the regular classes, and while in these classes if a blind pupil should need extra help in solving certain problems he will go to a special teacher for it, so that the regular duties of the class teacher shall not be increased. It is a well-known fact that once a blind child has learned to read and write he masters other studies much faster as a rule than do other children, for the reason that his attention is not diverted by outside objects."

Failures Who Made Good

THE number of men who have gone down and, apparently, out in the business world, but who are today designated as successful captains of industry, is large enough to be an inspiration. There is a popular notion that a man who fails must be a second-class business man. Nothing is further from the truth. The fact is that failure in modern business is a mere incident, says the Philadelphia Record.

There was Ream. He was an able merchant in an Iowa town, and he found himself insolvent. He ran a general store and sold farm implements, and the concern was an extensive one. But when collections became slow, he quit paying the collector himself, and so the creditors came down to look the situation over.

He made them the proposition that if they would allow him $12 a week for living expenses he would make the wreck pay out. They accepted the proposition, and Ream handled the assets and paid out. Then he went to Chicago. Being familiar with farm animals, he found employment at the stockyards. Later he turned his attention to wheat, and made a good deal of money. When one of the great biscuit companies was floated there was difficulty in raising the last two millions of the nine required. After others had failed, Ream took the scheme in hand and went to New York. His assurance won out, and capitalists subscribed the needed millions.

At present he is a director and member of the finance committee of the United States Steel Corporation, director of half a dozen railroads, associate of J. P. Morgan. When his name is mentioned in Wall street people listen with the utmost respect. There is a general impression that if Ream is in a scheme it is all right. So that the conditions which had floored him at the early part of his career really did not count.

Sage's case was different, because the failure had been preceded by unusual good fortune. One May afternoon 22 years ago Wall street was startled by the announcement that Russell Sage was "broke." The street already had more sensations than it knew what to do with. A week before several banks had failed. The street held millions of Sage's paper, and as early as 8 o'clock the following morning the stairway to the financier's office was jammed with anxious creditors. When the door was opened there was a college rush for the cashier's wicket. Payments were made for a time—with exceeding deliberation; then they stopped. The door was shut in the face of the crowd, and when one excited creditor tried to kick the door down a squad of police was required to convince the crowd that money could not be gotten out of Sage by violence. His obligations were sold on the street for 50 cents on the dollar. To redeem them meant to face a present loss of $7,000,000. Sage buckled down and found the money. When he died this failure left $70,000,000 and a reputation for thrift and good judgment second to none.

One's judgment may be right, and yet some inscrutable cause may turn things over disastrously; yet the correct judgment will count. How else can one explain the case of Theodore H. Price? In 1900 he said cotton was too low. But it persisted low, and his firm failed, with liabilities of $13,000,000. The failure, however, did not disturb him, nor did it change his opinion that cotton was too low. He raised some more money—partly, it is said, by writing life insurance—and tried again. Soon after the failure cotton was up to 11 cents instead of 9½ cents, and Mr. Price was rich again.

If anybody ever looked more broke than Charles T. Yerkes when he went into Chicago some 25 years ago, the pieces must have been too small to see. He had had some money, but not more than a fare was left of it. But he had inestimable capital in pure nerve, and that was sufficient. He soon dominated Chicago, and Chicago watched him breathlessly for 15 years. Yerkes induced some rich Philadelphians to help him to the money to buy control of several street railways, and when he secured the roads he came out of the big end of the horn by having spare money and the control of the roads both. Later he went to London and addressed himself to the task of consolidating and extending London's underground system, which he largely completed before his death.

Cyrus H. McCormick, inventor of the reaper and founder of a great fortune, and admittedly a tip-top business man, failed early in his career. He had already taken out the patent for the reaper, a document that was subsequently to be worth many millions. Yet he failed for a sum so small as to be laughable.