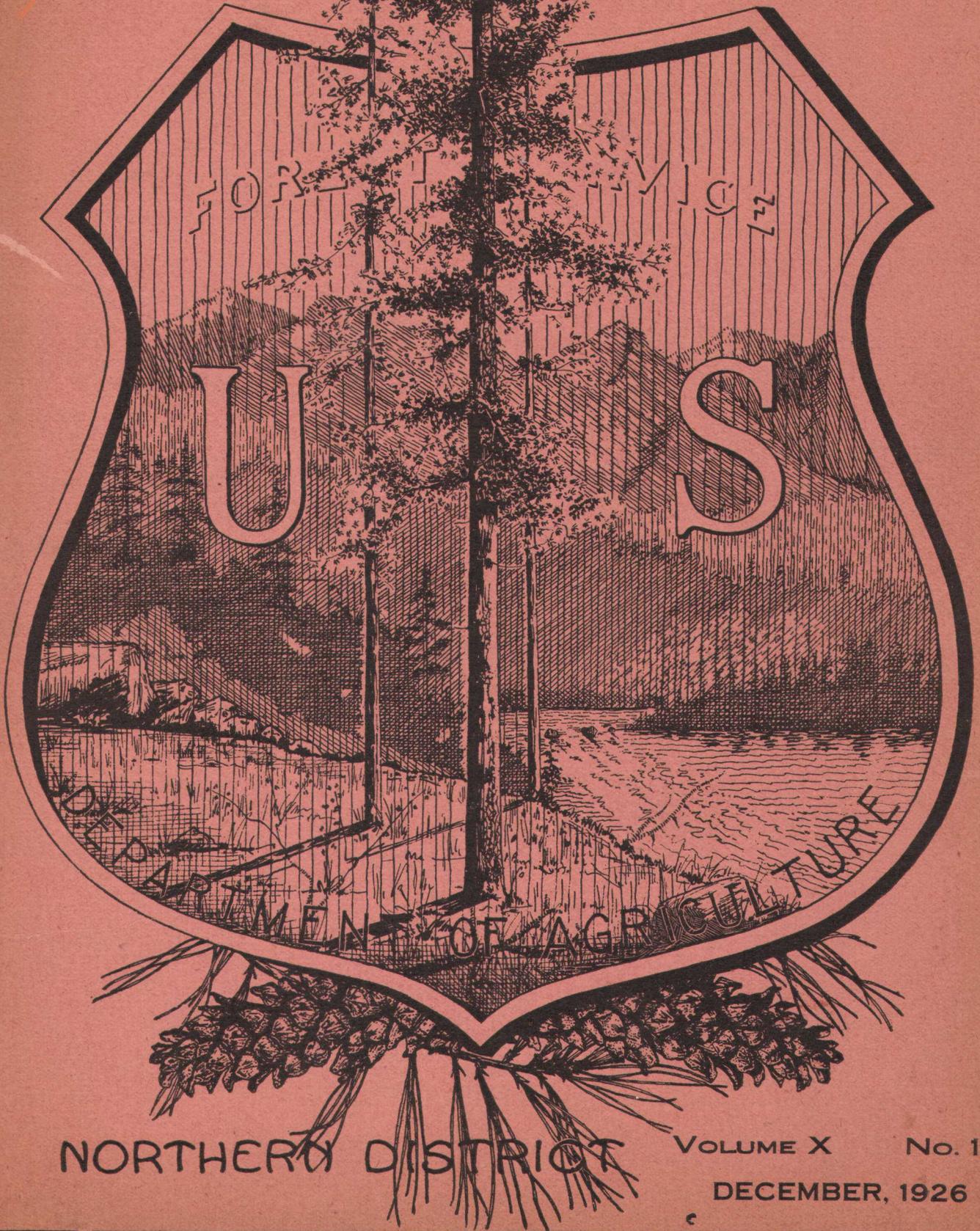


The

BULLETIN

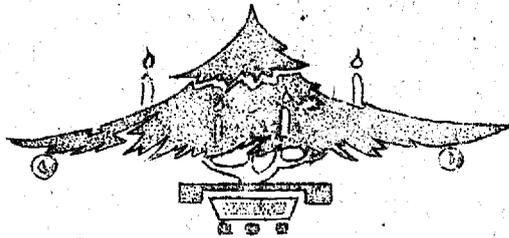


NORTHERN DISTRICT

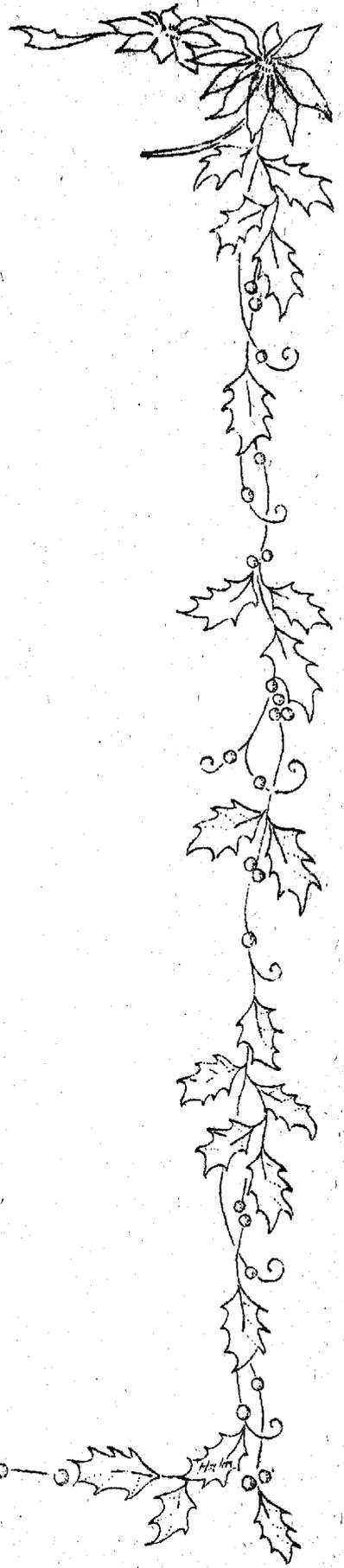
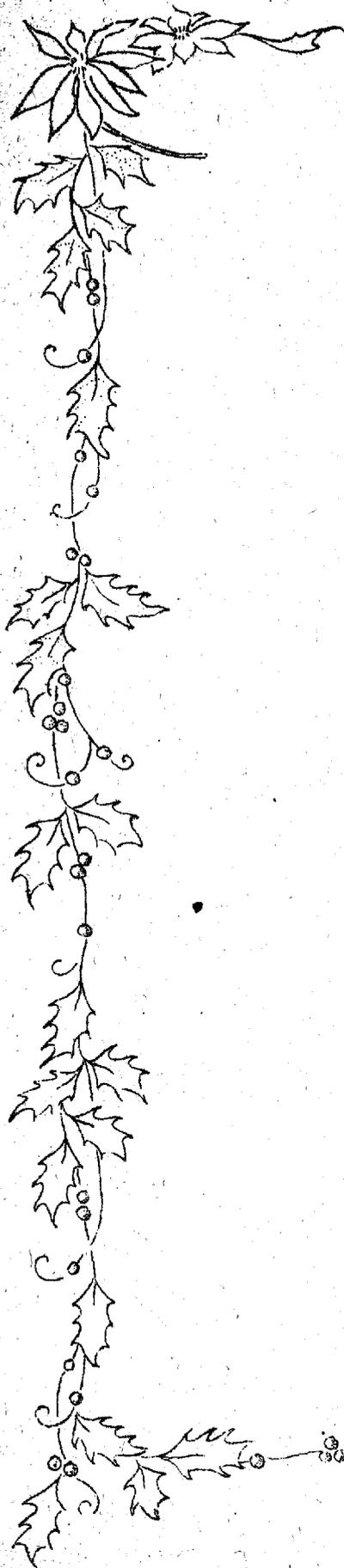
VOLUME X

No. 12

DECEMBER, 1926



Merry
Christmas



THE BOUNTY SYSTEM

For more than 50 years previous to 1920 the State of Montana paid bounties on predatory animals. It is reported that during this period more than a million dollars was expended by the State on bounties. In addition to this huge sum stock associations, round-up associations, and individual stockmen have paid out thousands of dollars.

I can well remember along about 1900, when the Shonkin Round-up Association, which covered a large territory on both sides of the Missouri River below Fort Benton, hung up a bounty of \$50 on grey wolves, and later this bounty was raised to \$100, and again in 1909, when I was Supervisor on the Custer Forest, the Otter Livestock Association offered a bounty of \$50 on grown wolves and \$10 on wolf pups. Many other associations did likewise. Of course, there is no way of knowing just how much has been paid from State and private funds, but I think it is safe to say that one and one-half million dollars would not cover the bill.

While some progress may have been made under the bounty system, it seemed slow indeed, and stockmen began to cast about for other methods. The fact that fraud in collecting bounty money was being perpetrated quite generally and there seemed to be no definite way to prevent it, helped mold sentiment against the bounty system. Fraud in many forms was practiced but the most common seemed to be for some local trapper to get in touch with trappers outside the state and exchange hides with them. That is to say that outside hides were brought in the state by local trappers for bounty purposes only -- the local trappers getting bounty on local hides and trading them for out-of-state hides.

Most of the Western States have adopted the hunter system in lieu of the bounty system, and all seem to be satisfied that a step in the right direction has been made. Montana adopted the hunter system in 1920, but allowed the "turkey raiser" to write into law a bounty system in 1925. The present bounty provides the following bounties for "animals killed between the first day of April and the first day of July, both dates inclusive of each year. For each grown wolf, \$15; for each grown coyote or coyote pup, or wolf pup, \$2; for each mountain lion \$20." Just why a bounty between April first and July first only seems a moot question. Can it be that the predatory animals like their turkey and lamb chops better during these months?

During the coming State Legislature there is going to be an effort to repeal the present bounty system, which, from a careful study of the attached map, seems to justify a change. Note, for instance -- thirteen Border counties paid bounty in 1925 on 5,166 coyote pups and 235 adult coyotes,

while the remaining 43 counties in the state paid bounties on only 2,938 pups and 174 adults. Or, in other words, 23 per cent of the counties paid 63 per cent of the bounty, which would seem to indicate that coyotes prefer to live in Border counties, especially along the Canadian Border, where, it is suggested, that they furnish company for the bootlegger.

The ratio of adults to pups shown by the bounty records is about one to twenty, respectively. Bounty hunters don't want to destroy the breeding stock, so instead of getting the mothers, they left them to bring forth a crop next year. It is estimated that the average litter is about six pups, which, if correct, means that about 1,250 female coyotes were left for seed by these bounty hunters.

Under the present bounty law, the funds of the Fish and Game Department are assessed \$7,500 annually, and it is interesting to note that less than 100 predatory animals were killed for bounty in the twelve big game counties of the state.

Another interesting view of the matter is found in the following example: Assume the amount of money paid for predatory animal bounties in the past has been one and one-half million dollars, and assume that all agree that it would be good business to spend an equal amount in the future to reduce or eliminate predatory animals. The question is: How is the best way? "Bounties," you may say. But no; we tried that and it doesn't work. What then? Well, a million and a half dollars, along with the fur values of predatory animals, would keep a trained and expert hunter in each county for the next 25 years. "But," you say, "that would be equal to a pension." Well, then, why not put three or four experienced men in each county for the next two or three years and clean up the job, and then a very few experts along the Border would keep the State free?

G. A. Smith.

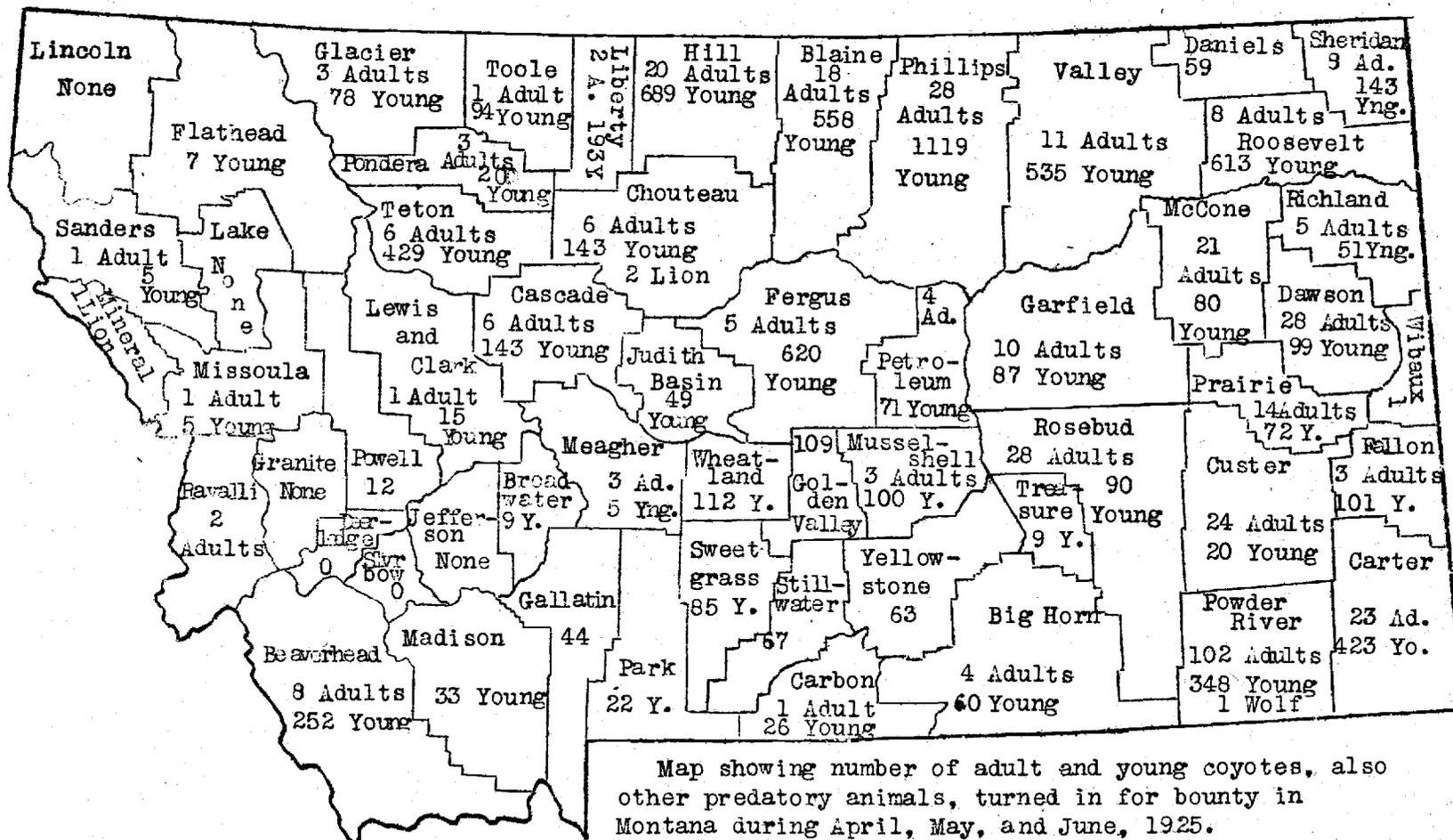
N. B. See following map of Montana.

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A Long-Distance Record (So Far As We Know)

During this summer's heavy fires in the West, large quantities of ashes, charcoal, and other fire material were carried great distances. In the Bureau of Research at Harrisburg is a small quantity of ashes and charcoal which was carried a distance of thirty miles, from West McDonald in the Glacier National Park to St. Marys. A. E. Rupp, Chief of the Bureau of Forest Management, reports that in 1920, when he was District Forester at Fort Loudon, fire material was carried from a fire burning on Sideling Hill in Fulton County to Fort Littleton in Franklin County, a distance of nine miles. Can you beat it?

From Bulletin of Penna. Dept. of Forests and Waters.



ABOUT SCOTT LEAVITT

Soldier - Forester - Congressman!

Scott Leavitt was born at Elk Rapids, Michigan, on June 16, 1879. During the war with Spain he served in Cuba with Co. L, 33rd Michigan Volunteers, the company being composed exclusively of sons of Civil War Veterans. Upon his discharge from the service, young Leavitt entered the University of Michigan, but before completing his course, went to Oregon and in 1907 entered the Forest Service as a ranger (on the Fremont). Three years later he was made Supervisor of the Lewis & Clark National Forest, Montana, and in 1913 transferred to the Jefferson National Forest, with headquarters at Great Falls.

At the outbreak of the World War, Leavitt resigned from the Forest Service and, being denied a place with the fighting forces on technical physical grounds, became federal director for Montana of both the U. S. public service reserve and the federal employment service.

In 1922 he was elected to Congress, after having won the Republican nomination in a field of nine candidates. He was re-elected in 1924 and is now the party nominee for a third term.

In Montana, Mr. Leavitt is credited with standing higher in the councils of the Republican party nationally than any other product of the State in a decade.

In 1913 Mr. Leavitt was married to Miss Elsie E. Frink of Falls City, Oregon. They have one son. The family home is at 2412 2nd Avenue North, Great Falls, Montana.

The Michigan Alumnus.

From Six Twenty-Six.

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Auto Company Buys Forest Land

The Fisher Body Corporation, said to be the world's largest manufacturer of automobile bodies, recently purchased 60,000 acres of hardwood timber in Louisiana and Arkansas. This purchase is reported to bring the Fisher northern and southern hardwood holdings, all acquired within the last three years, up to a total of 1,500,000,000 board feet of standing timber. The timber ownership is to be merged into an organization known as the Fisher Lumber Corporation, and it is reasonable to expect that such an important industry will handle its forest wisely with a view to continued production.

From Bulletin of Penn. Dept. of Forests and Waters.

KEEP THE DIRT OUT OF YOUR EYES

A number of talks with Friend White, since his article "Diggin' In - And Out" appeared in the November BULLETIN, have convinced me that there is justification for an "outburst" of some kind on his part. But it should be directed against the occasional "muddy" thinking about wood waste, and not toward the wood-utilization work generally. In fact, it is my feeling that some of the worst offenders in this regard are really of White's clan -- timber farmers.

It seems almost obvious that, in this material age, wood losses can be termed "waste" only when the utilization of such material is economically feasible. Therefore, we must agree with White's actual objection. Preachments about saving wood simply because it is wood are not only futile but tend to confuse and hinder the cause of real forestry. Of course, wood-utilization work has for one of its objectives the discovery of uses and methods that will decrease the amount of present wood losses which cannot be utilized at a profit. And surely, no one interested in forestry can find fault with such a goal.

The article in question not only failed to make clear the real point at issue but advanced several fallacies which should not go unchallenged. White, I am afraid, like too many foresters, has been digging so industriously in connection with his timber farming that the real objective has become hazy; figuratively, some of the dirt has gotten in his eyes. If White believes what he says, we must conclude that he conceives forestry as an end in itself rather than as a means to an end. He would have the farmer and other wood users keep him and the rest of the foresters growing trees, not because it is sound economics to do so, but just because they like to grow trees.

Cold, hard facts must be faced and the only conclusion possible is that in the final analysis, timber farming can have no place in our scheme of things unless it is justified by sound economic principles. This means the growing of trees at a profit; wood successfully meeting the fair competition of other materials. To do this the present markets for wood must be held and woods uses extended. This will be accomplished only if wood can successfully compete upon both a utility and price basis with substitutes. The development of methods and practices which will better fit wood for present uses, which will adapt it for new uses, and which will make possible economies in its production are, therefore, essential. And these are, broadly, the real objectives of all wood-utilization activities.

Take the wood-preservation work as an example. It is making a big contribution to the cause of forestry. Had not the preservative treatment of timber reached its present high

state of development, some of wood's greatest markets would, by now, have been largely taken by substitutes. Treatment of crossties, poles, posts, etc., gives to these wood products a greater utility. In a large measure, even White's "one post" might now be on the forester's hands. We may cite the instance of the Bitterroot farmer who continues to use untreated fence posts cut at his back door, but this forestry game must be judged from its broadest aspects and not from the standpoint of utilization in the backwoods.

I have faith in forestry, but this faith is based on forestry as a land use which will eventually pay its way by supplying a plentiful product of high utility at a reasonable price. And developments in wood utilization are going to be no small factor in bringing this to pass.

S. V. F., Jr.

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Is This What Is Happening to North Idaho?

The fact has been pretty well established that the destruction of forests and the clearing of land, which have been going on rapidly in the county during the last fifty years or more, have affected the rainfall and climate unfavorably. It is maintained that air and earth undergo considerable change when land is cleared of its timber: first, from the ground being exposed to the sun's rays, which causes the waters to evaporate more rapidly; second, by lessening the quantity and duration of snow; and third, by introducing warm winds through the openings made. That the size of most, if not all, the streams in the county has greatly diminished within that length of time admits of no doubt. There are people now living who remember when the average volume of water in them was twice what it is now. There is also abundant evidence to be found along the water courses to demonstrate the fact. Many springs, too, have perceptibly weakened within the memory of persons not very old, and some have disappeared altogether. To the patriotic the lesson is obvious. All efforts to restoration either by natural or artificial means, of the forest growth of lands thus denuded should receive due encouragement.

-- From History of Adams Co., Penn. - 1886.

Aaron Sheely,
In Bulletin of Penn. Dept. of Forests and Waters.

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THE PACIFIC MARINE

The Pacific Marine Pump, in my estimation, is the most effective and powerful little firefighter at our disposal today. Combatting fire with its natural enemy, water, it will, under proper conditions and if properly handled, prove extremely useful and often supplant many men. It is not infallible and cannot be expected to do the impossible. Having a very light high-speed motor, it must be handled with reasonable care and intelligence. The inner workings of the motor and pump should never be tampered with by an amateur. In my opinion, this little pump has won a permanent place in the front ranks of our fire equipment. It has been unjustly condemned by some in the past as impractical and costly. This prejudice is now, I believe, being rapidly overcome.

On the Kaniksu last summer, three Pacific and two Fairbanks-Morse pumps were at my disposal and were working almost continuously for several weeks. On several occasions, both makes of pumps saved many times their cost by checking and holding fires that could never have been held without their aid. The Fairbanks-Morse pumps lacked the mobility, power, and lift of the Pacific, but proved very effective for stationary work, protecting bridges and camps.

In general, all these pumps were working under favorable conditions. Such factors as abundance of water, accessibility to fire, short lifts, and a personnel familiar with motors aided in their effectiveness.

We found that a fire once checked with water must be trenched and watched as carefully, if not more so, than one where no water was used. Wetting down outside the fire line proved very effective, especially when backfire was to be used. Often, a little water properly directed would, in a few moments, widen our fire lines into a firebreak over a hundred feet wide and much wider when the inside was backfired at the same time. We also concluded that a fire cannot be stopped efficiently with water without some sort of trench as a base. Part of the valuable duties required of these useful little pumps was: checking slash fires in old cuttings, wetting down opposite backfires; extinguishing large snags or cooling around their bases so they could be cut; protecting buildings, bridges, and camps. Ordinarily, our pump crews consisted of one pump man, one nozzle man, and one helper; one or two additional men being detailed to help in emergencies and with the hose during moving.

From actual data collected on the three Pacific pumps on the Quartz Creek fire, we found that using over 2000 feet of hose or lifting water more than 300 feet was impracticable; also that 60 to 100 hours' continuous service was the limit of their endurance without overhauling, which usually consisted of replacing spark contact points, repacking, and taking up bearings. An

experienced men familiar with the pumps accomplished this in from two to three hours.

The total life of the Pacific Marine Pump is still a matter of conjecture with me, but were each of the three pumps employed on the east side of the Quartz Creek fire scrapped after the fire, they would still have been a very good investment.

J. B. Halm

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PLOWS AND GRADERS AS FIRE EQUIPMENT

The last summer, plows were used on four Class C fires on this district with very good results. All of these fires were in yellow pine and Douglas fir timber except one.

On the Smith Creek fire we were trenching in very rocky soil, but, even then, it made a mark and was very helpful in trenching.

I never yet have seen a Class C fire where it would be impossible to use a plow at some place. I think that I am safe in saying that one plow will do as much trenching as 50 men, and with less fuss about it, too.

We have tried the grubhoe and shovel enough to know that it is too slow, and we know that the plow and grader have proved satisfactory, so why not try more of them?

Let's have a few, and not borrow from the ranchers.

C. E. Powell - Bitterroot

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FRENCH FORESTS NOT FIREPROOF

The following excerpt from the New York Times, of November 28, 1926, may perhaps be of interest to the BULLETIN readers:

A. D. Moir, Jr. - Lewis & Clark

"Fires have done extensive damage to many of the great forests of France this autumn and, though there already exist stringent laws for the protection of the woods, it has been urged that more severe measures be taken. The fires, apparently of mysterious origin, have swept over many acres of beautiful woodland.

"Especially in the south of France, where the hot season is warmer and drier than in the north, have the

flames consumed great areas. The Department of the Maritime Alps has suffered probably more than any other. But there have been fires in the Ile-de-France also, and within a few miles of Paris, in the forests of Fontainebleau and Versailles, the guards have had to struggle with the problem.

"The historic forests in this section, where the damp atmosphere during most of the year causes moss to cover the trunks of the trees to great heights, have been as dry the last few weeks as a Middle Western American wood in August. Here and there the grass has become brown and covered with dust.

"Maurice Mangin, an expert in forestry, recently announced that he had discovered a species of acacia that was almost if not quite noncombustible; and it has been suggested that the planting of this flower in the forests might serve to reduce the fire hazards."

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EVERYWHERE THE LAMBIES STRAY THE HERDERS ALSO GO.

Our distinguished lumberman for District One is quoted as sympathizing with a sheep herder for his troubles in herding sheep under the blanket herding system. He told the herder that it must be a lot of trouble to put blankets on all those sheep every night. But here is evidence that it may pay:

Hampshire sheep, grazed on the Deerlodge Forest under the tepee system, went to the Chicago International and took the following prizes:

Champion and reserve champion ram, five firsts, two seconds, and one third prize. They only lost one first place.

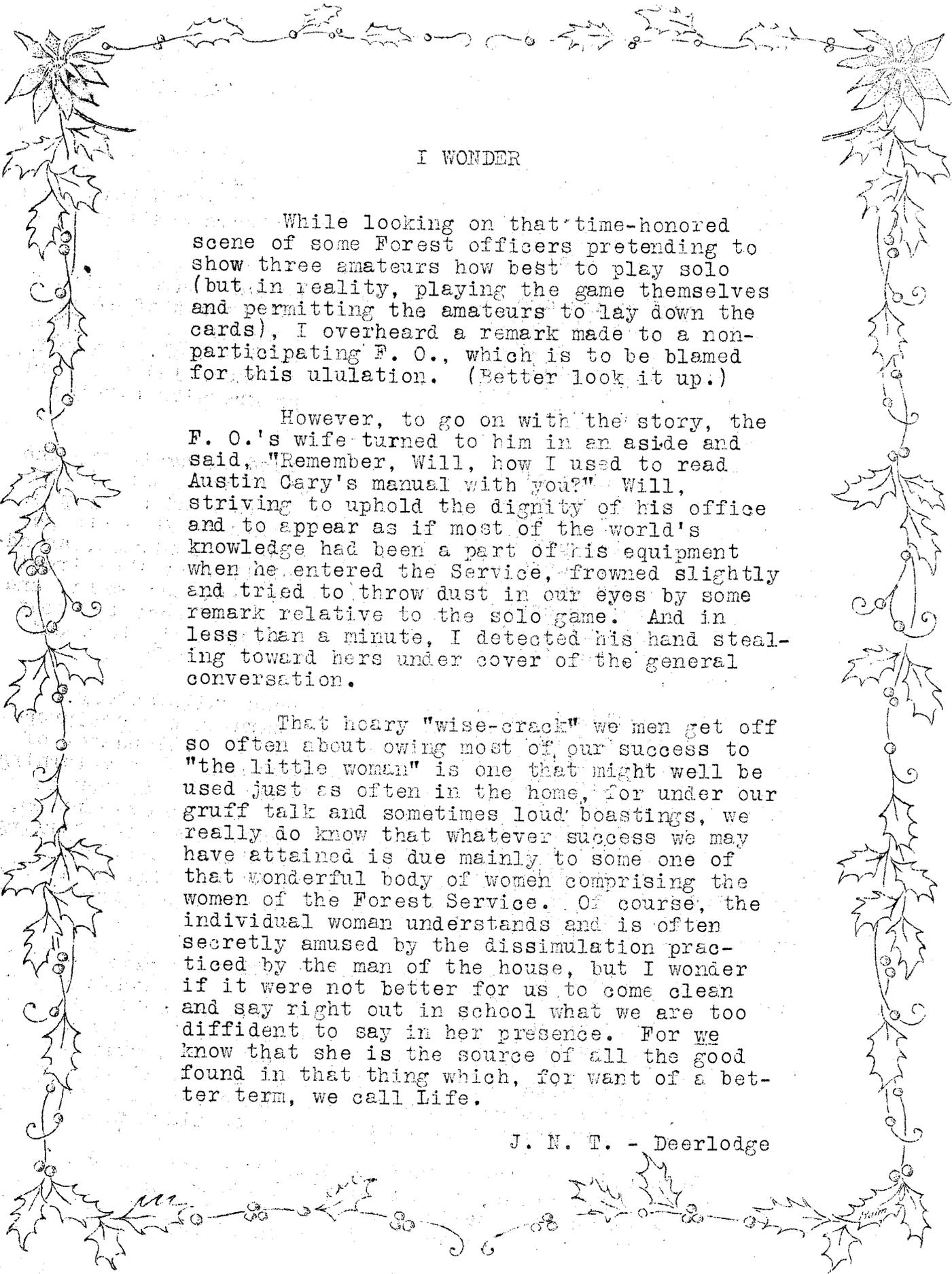
The point I wish to emphasize is not the superiority of the Deerlodge range; we admit that without argument. But if those who still hold lingering doubts about the practicability of blanket herding think this outfit would herd these gold-plated, diamond-studded sheep by that method if it wasn't the most suitable, they have another think coming. These sheep are too valuable to risk handling them under a dangerous, impracticable method.

The Mount Haggins Land & Livestock Company grazed about 3200 sheep last season and, except for the mature rams, the prize sheep were grazed on Forest range. They run in bands of about 1000 head, and the herders are equipped with tepees and horses and follow the blanket system in every detail.

The only exception made is for the weaner lambs, which are made into a band late in August. Naturally, these six-months old, black-faced lambs are about the worst proposition imaginable to herd, and it is necessary to hold them closely and where possible to corral them at night.

Blanket herding is no wild theory; it works and pays dividends.

J. B. T. - Deerlodge



I WONDER

While looking on that time-honored scene of some Forest officers pretending to show three amateurs how best to play solo (but in reality, playing the game themselves and permitting the amateurs to lay down the cards), I overheard a remark made to a non-participating F. O., which is to be blamed for this ululation. (Better look it up.)

However, to go on with the story, the F. O.'s wife turned to him in an aside and said, "Remember, Will, how I used to read Austin Cary's manual with you?" Will, striving to uphold the dignity of his office and to appear as if most of the world's knowledge had been a part of his equipment when he entered the Service, frowned slightly and tried to throw dust in our eyes by some remark relative to the solo game. And in less than a minute, I detected his hand stealing toward hers under cover of the general conversation.

That hoary "wise-crack" we men get off so often about owing most of our success to "the little woman" is one that might well be used just as often in the home, for under our gruff talk and sometimes loud boastings, we really do know that whatever success we may have attained is due mainly to some one of that wonderful body of women comprising the women of the Forest Service. Of course, the individual woman understands and is often secretly amused by the dissimulation practiced by the man of the house, but I wonder if it were not better for us to come clean and say right out in school what we are too diffident to say in her presence. For we know that she is the source of all the good found in that thing which, for want of a better term, we call Life.

J. N. T. - Deerlodge

GYPPO BRUSH DISPOSAL ON THE COEUR D'ALENE

Satisfactory brush disposal, as everyone who has anything to do with the Western Forests knows, has become one of the major activities. Costs, methods, and standards have been given a great deal of thought by the Supervisors and the timber-sales personnel.

Several years ago the Coeur d'Alene carried on quite a little work under the gyppo system, with fairly satisfactory results. In 1924 and 1925, however, everything was done on a day basis, which resulted in a cost of \$1.03 and \$1.05 per M, respectively. For the most part the brush was piled and then burned at a later date with very little progressive burning taking place.

In the spring of 1926, it was decided to again try the gyppo system and, as a consequence, about 80 per cent of the brush resulting from the 1926 cut has been handled by gyppos. The contract price per M ranged from 70 cents to 75 cents per M for piling and, where burning was done under contract, an additional 10 cents per M was allowed, which brought the direct cost up to about 85 cents per M. The overhead, equipment, and incidental costs will bring the total for the Forest to about 90 cents per M, and this figure will probably apply to a cut of 30,000 M.

The results, in most cases, have been satisfactory, although there are exceptions where the burning was not properly controlled, with an attendant loss of a small number of seed trees. There were only three or four men to whom burning contracts were let, and they were old heads who had been in the game a good many years, and I believe, with one exception, each got away with a good burn, and the case where the burning spread, the responsibility rests with the Forest Service, since the actual work was being directed by the officer in charge of the sale. On the whole, the work accomplished under the gyppo system this year is considered satisfactory.

The various lumber companies operating on private timber within the Coeur d'Alene Forest have come to the conclusion that the Forest Service can dispose of slash more cheaply than any other agency, and as a result we have been acting the role of "king Gyppo" for the past two years. Because all private lands are intermingled with the National Forest lands, it is felt desirable, from a protection as well as an exchange standpoint, to leave cut-over private lands as free from slash as possible.

Generally, on these lands, a modified method of disposal has been employed which, from a silvical standpoint, could hardly be adopted as a satisfactory one for slash disposal on National Forest land. Advantage is taken of all windrows and

large swamped piles, and occasionally some broadcast burning has been carried on. This, of course, results in the lowering of costs as well as standards. On private land the rate per M for brush disposal which has been handled by the Coeur d'Alene organization during the past two years has been 60 cents.

While the gyppo system has resulted in a slightly lower cost, it has by no means solved the slash problem. Close supervision is required and the best gyppo to be found will cut the corners at every opportunity. When reliable men are to be found, it has worked out better to contract the burning as well as the piling. This results in a better job of piling, since knowing he has yet to burn the slash and that the cost of piling is reflected in the burning, the gyppo puts up a more compact pile and the chance for fire to spread is reduced to the minimum.

The question is often asked why slash cannot be disposed of by day labor as cheaply as on contract. On this Forest, contracts have been let to the most reliable men at 70 cents per M, and they have made as high as \$10 per day, and done a comparatively good job. Some of these same men have been employed by the day at \$4.40 and the cost has been as high as \$1.25 per M. It is the element of chance, the gamble, which is the one big governing factor. The gyppo stakes his brawn and energy against a certain physical obstacle which he endeavors to overcome within the shortest time possible. Hours mean little to the average gyppo. No present-day camp foreman has ever been fast enough to kick open the bunkhouse door and say, "All right, boys," because the gyppo is already on his way. They work long hours; many times work is performed after supper, especially in the summer months, when the days are long. Rainy days and Sundays are all the same to them, the one thought being to finish the job as quickly as possible.

On a day basis the most conscientious worker looks forward to an 8-hour day, with dinner in camp as a general rule. It is safe to say that the gyppo works on an average of 25 to 33 1/3 per cent more hours over a given time than a day laborer, to say nothing of the increased energy he puts into the job.

The gyppo system has its advantages as well as its disadvantages, but we are convinced that it is a partial solution of excessive costs and must, therefore, be given due consideration in the administration of timber sales.

Howard Drake

SEED TESTING

All of the seed specimens collected under request contained in Circular Letter G-258 have been check-identified and card records of all samples submitted have been made. These contain all of the data which were included with the collections. In some cases complete data were not included as requested, and in some samples there was too small a number of seeds to make a comprehensive test. These samples will be tested, however, and results given the collector. Some few collections were immature, having been gathered before the seed was ripe.

Before the actual testing work was begun, all agricultural experiment stations were asked for the methods which they had developed in the technique of seed germination of cereal and forage plants. Replies from these stations showed that the development of the farm cereal-seed testing was generally well worked out, but that they had no knowledge of methods of testing the seed of native forage plants.

The methods by which the seeds submitted will be tested will be carried in two series, as follows:

1. Porous plate and filter paper under watch glass.
2. Sand-box test. This is actual germination in soil.

One hundred seed will be used in each test in order that conclusive results may be obtained.

Three sets of seed will be used in these tests as follows:

1. Seed as submitted after having been cleaned and counted and the percentage of worthless seed recorded.
2. Cleaned seed left outside all winter subject to natural conditions -- freezing, thawing, rain, snow, etc., to determine the increase or decrease of germination due to natural factors.
3. Retain some of the seed for a year or longer to determine relation of age of seed to percentage of germination. This is necessary, since some seed are known to be dormant for a season or more before germination.

Constant records of humidity are kept in the test room by means of psychrometer readings three times a day to check the continuing hydrograph charts.

Soil temperatures are obtained by soil thermographs with soil attachment imbedded in the soil of the seed box.

Air temperatures are checked daily by standard maximum and minimum thermometers.

Seed left in the weather will have the same records taken.

Each Forest officer's collection is kept separate and results will be given on each individual collection by each method where a sufficient number of seed have been submitted.

One year's test will not give final results, and it is intended to carry the experiment over a period of five years in order to have conclusive results. This is necessary, since the difference of weather conditions under which the seed is produced during different seasons may have a marked effect upon the viability of seed produced during the different seasons.

Dean Spaulding and Mr. C. V. Ruebottom of the University of Montana are collaborating on the actual work of testing.

The results of this year's test will be forwarded to the collectors during the spring of 1927.

T. I.

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DUAL USE OF RANGE WATER DEVELOPMENT

Over in the northeast corner of the Beaverhead, near Divide, there is some dry range. There is a series of dry gulches. One of the largest of these gulches is fully three miles long and it was in this gulch that the ranger, John Long, about three years ago, decided to try for water.

There was not even a wet-weather spring or a muddy seep as a place of beginning. A well was dug at a place where a small patch of moisture-loving shrubs and herbaceous plants was growing. This location was also about the center of the dry range and about midway between the head and mouth of the gulch. The well was dug to a depth of 12 feet and a small steady seepage of water was encountered. Heavy cribbing has added permanency to the well. Then, going down gulch 75 to 100 yards to a point one or two feet below the bottom of the well, a ditch was dug on a grade, with the bottom of the well the objective. As the depth of ditch increased to 7, 9, 10, and 12 feet, pits and tunnels were substituted for the open ditch. An inch pipe was laid that would drain the well and an artificial spring had been made. A series of three watering troughs was installed where they filled automatically from the pipe.

Thus, a splendid watering place was formed and a good piece of range made available for summer use.

Chapter II

A Supervisor's sale of saw timber has since been made on the upper portion of this gulch. A camp and portable

sawmill are now being set up at the spring.

This is the most intensive water development and use I have seen. The artificial spring serves both range and timber uses, and is used winter and summer. Perhaps the nearest rivals in intensive use are some of the water developments on the Custer, where a man, when thirsty enough, may also drink directly out of the troughs used by cattle and horses when the domestic stock is not using them.

Wilfred W. White

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Group Insurance Rate Drops

On November 9, 1926, the Federal Employees Association leaders at Denver met and determined an average premium for the whole group of Federal employees now enjoying group insurance with the Capitol Life Insurance Company. The average premium established is \$12 per thousand per year, beginning February 1, 1927. Any person entering the group before February 1 will pay the premium for his age, but beginning February 1, he will pay the average premium of \$12 per year. This may be paid semiannually in six-dollar payments.

Beginning November 9, 1926, only those 50 years of age and under can come into this average group and receive the benefit of the \$12 annual premium. However, once qualified as a member of this average group, he remains a member of that group regardless of increase in age. For those between 50 and 60 years of age, persons may come in under certain conditions and pay their attained age premium each year. For those past 60 years of age, no insurance can now be allowed. Any employee of the Forest Service who desires to take out group insurance may secure application blanks upon request to The Federal Employees Association, Denver, Colorado.

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Grazing on National Forests and Public Domain Mentioned

°° A survey should be made of the relation of Government grazing lands to the livestock industry. Additional legislation is desirable more definitely to establish the place of grazing in the administration of the National Forests, properly subordinated to their functions of producing timber and conserving the water supply. Over 180,000,000 acres of grazing lands are still pastured as commons in the public domain with little or no regulation. This has made their use so uncertain that it has contributed greatly to the instability of the livestock industry. Very little of this land is suited to settlement or private ownership. Some plan ought to be adopted for its use in grazing, corresponding broadly to that already successfully applied to the National Forests. °°

From President's Annual Message.

Daily Bulletin, Southwestern District

CONTRIBUTION TO THE NATURAL HISTORY OF THE LUMBERJACK

This is the age of science, and everything succumbs to it. From electrons to elephants, from submarines to stellar striations, from the most abstract to the most applicable, knowledge is being systematically acquired. There are few fields, however, which have been influenced less by scientific method than manners and customs. The knowledge of the social habits of ourselves, as well as of our ancestors of three hundred or three thousand years ago, is based largely on personal opinion. Hamlet and Habakuk may be literary monuments, but we have no means of knowing whether the characters which they portray were typical of their day, or merely the product of some inaccurate author's mind.

Much has been written about the lumberjack, mostly bunk. Furthermore, a great deal that has been said on this subject is exceedingly indefinite. We often hear the expression: "He guzzles his food as fast as a lumberjack." But how fast is that? If the question is not answered now, while the present-day axe wielder and saw duller is still here to be analyzed, its solution may soon become as impossible as the famous question of the late nineties, "How old is Anne?" And so, as the proper scientific report says, the present study was undertaken. It is realized that the data gathered are not sufficient for definite conclusions, but the tentative results of this study are being submitted in the hope of stimulating others to join in it.

The question of primary interest, as intimated above, is: how fast does the lumberjack eat? To answer this, 40 lumberjacks in a North Idaho camp were timed at every meal for 10 days. Not only the first bolter and the last Fletcherizer were clocked, but also the average man -- the twentieth fellow to leave the table in this sample of 40. As a result, the following figures were obtained:

Meal	Minutes Required for Eating by the		
	Fastest Man	Average Man	Slowest Man
Breakfast	6	10	15
Lunch	8	12	16
Supper	8	12	17
Daily Total	22	34	48

A natural question which arises after perusing these figures is, whether the slow eaters are habitual laggards, or whether it is more or less a matter of chance who comes out last in this mad dash for sustenance. At every meal the last three men to stack their dishes were noted. At the end

of 10 days, it was found that eight men out of the 40 were among the final three to leave the table 82 per cent of the time. In other words, you could pick one fifth of the men in camp, and five times in six the last three would be composed of them.

Much has been said about the lumberjack's crude table manners. It seems probable that an exaggerated opinion is prevalent on this subject, because the average person notes the most glaring habits more than the common ones. As a matter of fact, it was found that only 60 per cent of the eaters were two-tool men; that is, used both knife and fork to lift the food toward their mouths. As for genuine sword swallows, only 13 per cent actually inserted the knife into the oral cavity. But 40 per cent were habitual bread spearsers, or in other words, commonly utilized their forks to harpoon the staff of life. Of course, on occasion, almost everyone resorted to this expedient, but only two in five were regularly addicted to it.

It is fitting, before concluding this paper, to investigate certain aspects of the lumberjack's language. For this purpose a tally was kept, during 15 minutes of a conversation between three old snus chowers, of all words used which would be barred in so-called polite society. During this quarter-hour 129 such words were spoken, 69 profane, 45 of sexual import, and 15 excretory. God led all the rest, but good, old-fashioned damn ran him a close second. Third place was taken by ----- But I guess I'd better stop here lest any Watch-and-Warder should peer between these covers. Anyone interested can write the author for more specific details.

Robert Marshall - Experiment Station

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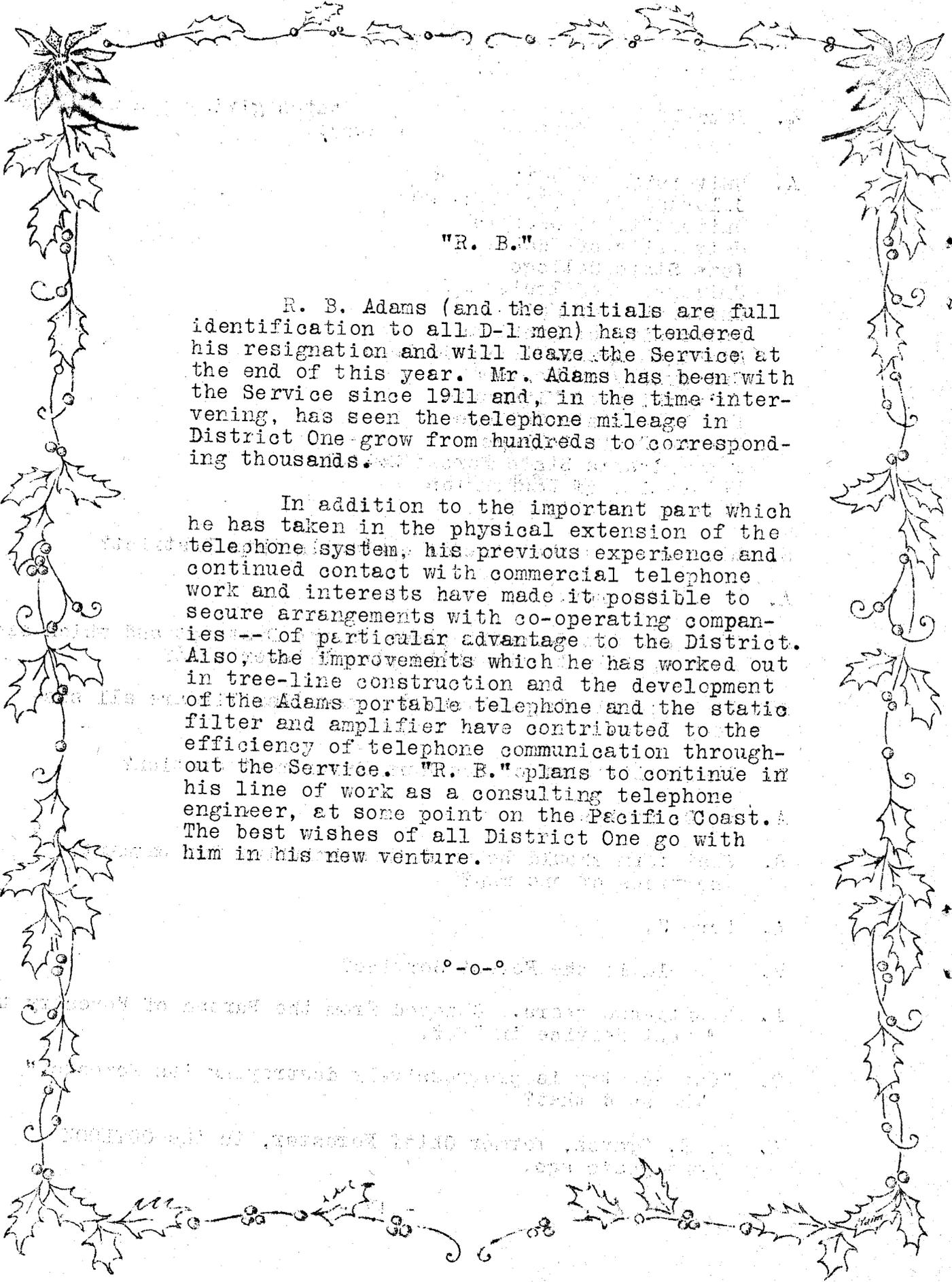
ANSWERS TO QUESTIONS PROPOUNDED IN NOVEMBER BULLETIN

(But they were supplied by the original propounder, since no other replies were received.)

1. How many National Forests in District One?
 - A. Twenty-four.
2. Who is W. Sparhawk?
 - A. Forest economist, U. S. Forest Service.
3. What is grazing rate per head on sheep, cattle, and horses?
 - A. Cattle rate, from 80 cents to \$1.20 per annum; horses 25% less than cattle rate per annum; sheep 25% less than cattle rate per annum. All rates for three months or less are 1/9 of the yearlong rate per month. All rates

for periods longer than three months are 1/10 the year-long rate per month.

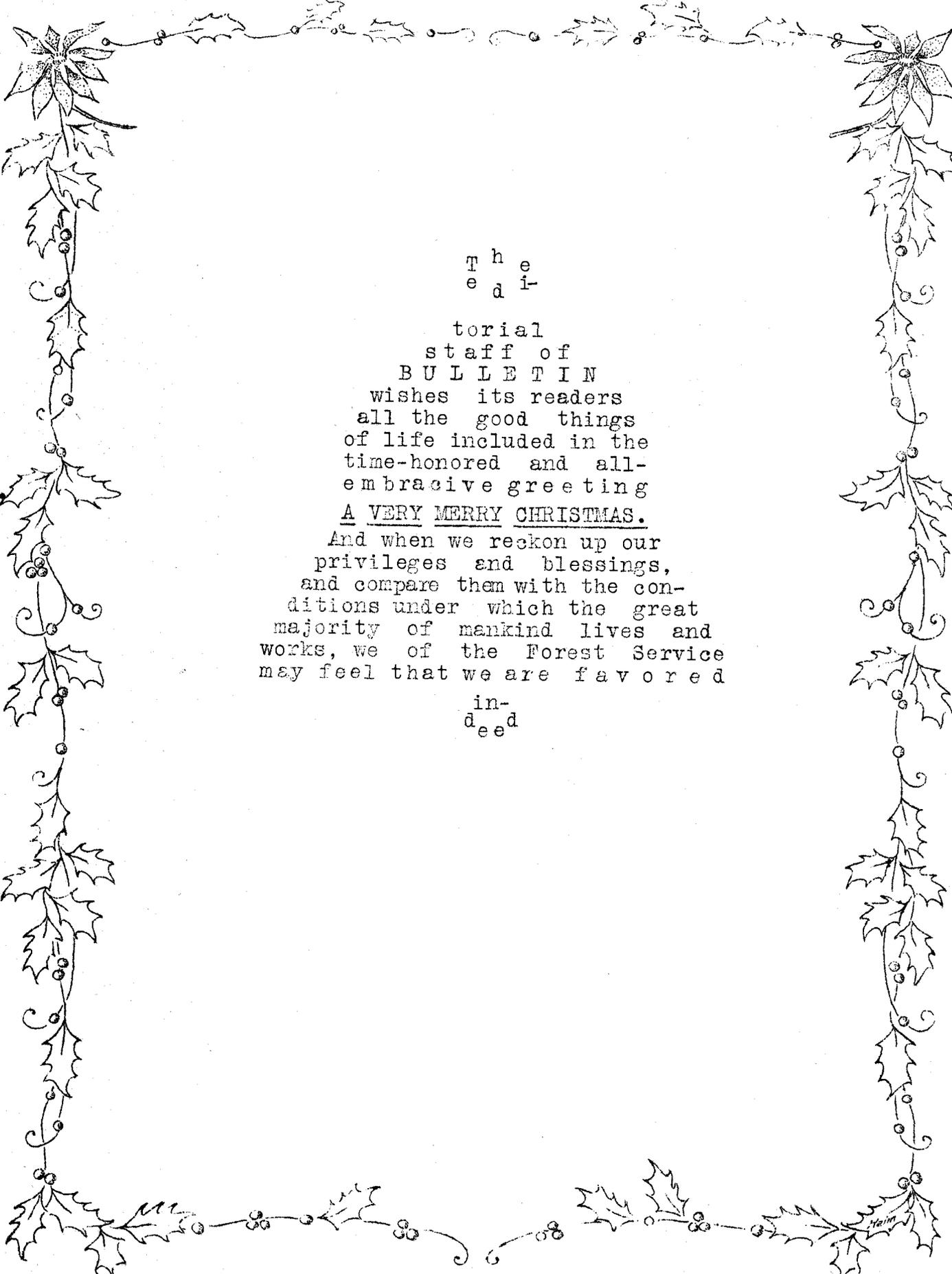
4. Name 10 schools in the United States giving courses leading to B. S. degree in forestry.
 - A. University of California
Colorado School of Forestry
University of Georgia
University of Idaho
Iowa State College
University of Louisiana
University of Maine
University of Michigan
Michigan Agricultural College
University of Montana
University of Minnesota
New York State College
Oregon State College
Pennsylvania State Forest School
University of Washington
Yale University
5. Who examines the mineral claims in this District?
 - A. C. A. McElroy.
6. What are the 5-needle pines in the District and which are susceptible to the white pine blister rust?
 - A. Pinus monticola, albicaulis, and flexilis are all susceptible.
7. Who is Director of Southern Experiment Station?
 - A. R. D. Forbes.
8. What form should be used in submitting for payment, services of one man?
 - A. Form 3.
9. How old is the Forest Service?
 - A. Twenty-one years. Changed from the Bureau of Forestry to Forest Service in 1905.
10. "Our country is progressively destroying its forests."
Who said that?
 - A. H. S. Graves, former Chief Forester, in the OUTLOOK many years ago.



"R. B."

R. B. Adams (and the initials are full identification to all D-1 men) has tendered his resignation and will leave the Service at the end of this year. Mr. Adams has been with the Service since 1911 and, in the time intervening, has seen the telephone mileage in District One grow from hundreds to corresponding thousands.

In addition to the important part which he has taken in the physical extension of the telephone system, his previous experience and continued contact with commercial telephone work and interests have made it possible to secure arrangements with co-operating companies -- of particular advantage to the District. Also, the improvements which he has worked out in tree-line construction and the development of the Adams portable telephone and the static filter and amplifier have contributed to the efficiency of telephone communication throughout the Service. "R. B." plans to continue in his line of work as a consulting telephone engineer, at some point on the Pacific Coast. The best wishes of all District One go with him in his new venture.



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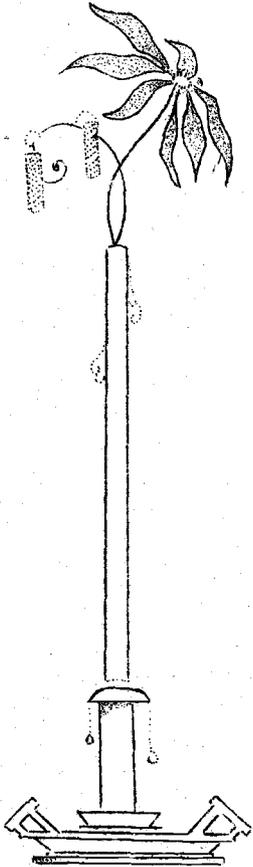
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staff of
B U L L E T I N

wishes its readers
all the good things
of life included in the
time-honored and all-
embrasive greeting

A VERY MERRY CHRISTMAS.

And when we reckon up our
privileges and blessings,
and compare them with the con-
ditions under which the great
majority of mankind lives and
works, we of the Forest Service
may feel that we are favored

in-
d e e d



*A Happy
New Year To
All The Bulletin
Readers.*

