

Use of Water Power Means Boon to Prosperity of the Nation



By FRANKIN K. LANE, Secretary of the Interior

In the marvelous material progress made by civilization during the last century the greatest single factor has been the substitution of mechanical energy for human labor. In proportion to the degree in which man is relieved from the necessity of devoting himself to the mere struggle for material existence, there has been and will be measured the advance of arts, science and philosophy, literature and the better things which make for the higher and nobler life of a nation or of the world.

We are living today in the dawn of an age in which power is the basis for our material progress. The productive abilities of our 100,000,000 people are increased by the use of probably 125,000,000 horse power of mechanical energy, not including the animal power furnished by 30,000,000 horses and mules. Most of the mechanical energy is used in the form of electrical current. When applied to industrial uses one electrical horse power does the work of ten men without tiring.

Increasing Man's Productivity. Conservation of human labor goes hand in hand with utilization of mechanical energy, and utilization of that form of energy most cheaply and least wastefully developed accomplishes the maximum in freeing man from menial toil and increasing his productivity. In the last decade we have harnessed for our utilities and industrial needs something like 6,000,000 horse power of water.

This accomplishment stands for real progress, but, as compared with our possibilities, it is not such progress as we should have obtained. Although we are utilizing today 6,000,000 horse power of water, we are annually, daily neglecting and wasting ten times that amount, largely because of our inapplicable laws, since most of the water powers not in use are under government control, and the present laws do not adequately make provision for their fullest development and use. There is in no sense in the United States enough water power to equal, if harnessed to the wheels of industry and used continuously, the daily labor of 1,800,000,000 men, or thirty times our present adult population.

This misuse of our water powers is a significant illustration of the opportunities and possibilities of the future of America. It is equally significant of the lack of intelligent development of resources, employment of opportunity, and coordination of effort which has, to the present time, marked our political and industrial growth.

Only the Surface Touched. We have \$200,000,000,000 of accumulated wealth, but we have mined only the surface of our natural resources. Many times two hundred billions of wealth lie beneath this carelessly scratched surface awaiting only the coordination of capital, labor and state-manship for its realization.

And in this development and utilization of natural resources, particularly of water powers, we have, for some good reasons and some not so good, fallen behind the rest of the world. While we are bickering over terms of legislation to make our water powers available, other countries have developed their powers and with them created vast new industries based upon scientific discovery and invention, of which we have none.

We are depleting our fuel supply in the manufacturing sections of the East and Middle West, while in the far West are mountains of undeveloped raw materials adjacent to unused water powers whose development would mean the establishment of great new industries in new manufacturing centers.

We are robbing our farm lands of fertility and failing to realize the utmost of our agricultural opportunities because of our dependence upon foreign sources of high priced supplies for chemical plant foods or fertilizers, while mountains of phosphate rock, lime and lignite in the West await only the magic touch of atmospheric nitrogen extracted and fixed with the aid of cheap hydro-electricity to furnish a low-priced and plentiful supply of fertilizing elements.

Millions of acres of lands rich in plant foods lie arid and waste in the western country which can be converted into fertile and productive farms, gardens and orchards merely by pumping into them the waters of the streams flowing through them. This miracle of making the desert bloom awaits for accomplishment only the laws which will permit capital and enterprise to engage in the harnessing of these streams so that they can pump themselves onto the thirsty soil.

Complete Preparedness. Behind a complete preparedness, whether industrial or military, must be the complete machinery of an indus-

trial nation's life. Today we produce most of the commodities which make for this preparedness. To produce the others is very largely a matter of developing those resources we have neglected, and in the forefront of these neglected resources are our water powers.

Such development will open to the West an industrial era of such possibilities as have been almost undreamed of. The fuels available include natural gas, oil, lignite and coal. The coal, reduced to coke, offers raw material for the production, by electric smelting processes, of the carbide extensively used for illuminating purposes. Here at hand are great deposits of limestone that will furnish the lime required to form calcium carbide used in the fixation of nitrogen and the production of ammonia. At hand, also, are mountains of phosphate rock awaiting the installation of appliances to free its content of phosphoric acid and combine it with ammonia as a fertilizing agency at less cost than any now known.

Sodium sulphate, sodium carbonate and sodium chloride are here, the latter offering material for electro-chemical production of soda, bleaching powder, etc., in time of peace and for the making in wartime of the deadly chlorine gas now devastating the trenches of European battle fields.

Abundant Iron Deposits. Iron deposits are here in abundance, which, with fluxing and reducing materials at hand and cheap hydro-electric power as the agency for reduction, may make the Pacific Coast a competitor with the Ohio Valley in the production of special grades of pig iron and the manufacture in electrical furnaces of high grade steels. Also at hand are the materials for the manufacture of such steel alloys as ferromanganese, ferrochromium, ferroaluminum, ferrotungsten, ferromolybdenum and others. Here are rare metals—barium in the form of sulphate and carbonate, zinc and copper, gold and silver—all awaiting the magical touch of the cheap electrical potentiality in our wasted streams to make their utilization the basis of new settlements, new towns and cities, new centers of civilization and new sources of activity and wealth.

As a by-product, and not an unimportant one, of the atmospheric nitrogen plants, we can produce cyanide, giving new life and impetus to the mining and production of precious metals from low grade ores. In fact, this material either as by-product or from metallic sodium produced with the cheap power available, should make the Pacific Coast the logical distributing center for cyanide used in gold extraction. Our Alaskan copper, now shipped as far away as New Jersey for smelting, may be cheaply and profitably reduced and manufactured by electrical processes on the Pacific Coast, and the same hydro-electric power which will bring these industries into existence will afford the energy for cheapened transportation of their products over electrified railways.

Security of Investment Needed. We must depend upon private enterprise and capital to secure this development. To enlist private enterprise and money in the work, our legislation must offer to investors, to promoters and builders, the security of investment and hope of reasonable reward or return which will induce them to put their money and brains into these enterprises. The door must be securely locked against exploitation of the public need and speculation in future values of these power sites, but there must be no improper barriers or handicaps to enterprise and development.

Production of cheap power depends as largely upon the securing of investment at low rates of interest as upon economy of physical operation. If the legislative conditions are such as force capital to earn large returns it necessarily means higher priced power and eliminates many of the desirable sites to which cheap power could be put. If it is economical to combine more than one water power under a single operating control or with one distributing system which will increase the percentage of generating capacity utilized and so reduce the unit cost, neither mere prejudice nor political timidity should be allowed to prevent such economical operation.

The big things which should not be lost to sight are that use constitutes the highest form of conservation of water power, that power not used today is wasted, and that power used today does not diminish the potentiality of the same power for use in the future, while every kilowatt of electrical energy produced by water control serves human labor or adds to its productivity and is the equivalent of a fuel saving which closely affects not only present day industrial and social conditions, but future cost of living as well.

MOHICAN ANTHONY

A Christmas in Which Indians Took Part

By F. A. MITCHEL

Did you ever stop to think why it is that Santa Claus comes down the chimney to deliver his gifts? I have thought about it a good deal. In these days when chimneys are small and some of them are not opened up for fireplaces it must be very hard for a man, and a very fat man at that, such as Kris Kringle is pictured, to come down at all, and when we consider that he carries a large sack of toys with him it would seem that it must be harder still. It would be much easier for him to leave the gifts on the porch or in some other place easily reached.

I'll tell you why, I think, Santa Claus comes down the chimney with his pack. He began to bring little children gifts many years ago. At that time chimneys were very different from what they are now, and the fireplaces were different too. The chimneys were so large that chimney sweeps would go down into them and clean out the accumulated soot. The fireplaces were deep and wide. There were in those days no cook stoves in which to prepare meals. The cooking was done in the fireplace. There was an iron implement in every fireplace called a crane, on which the kettle was hung and could be swung over the fire. Another implement was the spit, something like a big arrow, which was stuck into the meat so that the cook might hold it in position to be cooked.

In those days, too, the houses, especially of the great mass of poor people, were low, and the chimney top was much more easily reached than now. I can conceive of a snowdrift against the side of a peasant's cabin forming a perfect slope with the roof to the ground, and when packed hard or incrustated Santa Claus might drive his reindeer right up to the chimney top, and nothing would be easier than for him to let himself down into the great fireplace and leave his gifts there.

I have told you these things about how Santa Claus got into the habit of descending the chimney with his gifts—a habit that seems to have struck to him—because I am going to tell you a story about a family who lived several hundred years ago in the Dutch colony which is now the state of New York—in one of those low houses with a big chimney. The people of the colony were mostly Dutch, and they called Santa Claus St. Nicholas, he being their patron saint.

Schenectady, now a city, was one of the first settlements in the north and west part of the colony, and the inhabitants made their living by trapping wild animals and selling their skins. Sometimes the Indians would bring in the pelts, as they called them, and sell them to the whites, who would sell them again. On the other side of the Mohawk river from Schenectady is a place where the Indians used to torture and burn the prisoners taken in war.

In Schenectady lived a fur trader by the name of Van Schoonhoven, with his wife and several little children, the eldest of whom was a girl seven years of age, named Katrina. One day Van Schoonhoven was returning from a trapping expedition with pelts, and coming to the river bank opposite the settlement he found a number of Indians in the act of executing some captives. They had tortured and burned all the prisoners except one person, a warrior whose wife and children were bidding him goodbye before he went to the stake. Van Schoonhoven, filled with pity for this family, offered the savages all his pelts for the captive's life. The offer was accepted, and the released man and his family went with the white man to Schenectady. They were taken to his cabin, where they were given food and would have been given shelter if they had not preferred to remain in the open.

These Indians were Mohicans, and since the family name was unpronounceable they were called Mohican Anthony, Mohican Mary, and so on, each being given a name. They remained a long while in Schenectady and learned much of the white man's customs. Of course they were very grateful to the man who had saved the father's life by giving a whole season's catch of pelts, which he would otherwise have sold for more than \$100, or \$500. It was winter when the family came to abide with the Van Schoonhovens, and they spent a Christmas there. Katrina Van Schoonhoven tried to explain to them how St. Nicholas would come down the chimney on Christmas morning, but they could not see how he could drive his sleigh up on to the roof of the cabin.

But when on Christmas eve the children were told to hang their mosses to the chimney piece and the next morning received them full of toys they believed what had been told them. The Van Schoonhovens, father and mother, were much amused one Christmas morning to find that the Indians had placed boards against the side of the cabin so that St. Nicholas could drive his reindeer up on to the roof.

In the early spring Mohican Anthony, his wife and his children, the snows having melted so that they could travel, left their white friends and went back to their tribe. Katrina had taught one of the children—Mohican Alice she was called—to read, and Katrina gave her a book telling all

about the Christ Child whose birthday was celebrated by all Christian peoples. The Indians departed full of gratitude and hoped the good Magdon would give their benefactors "plenty meat and clothes."

That was the last the Van Schoonhovens ever saw or heard directly of the Mohican. Several years passed, and the saving of the father's life and the family's sojourn with the man who had paid for it with his pelts had become one of the many half forgotten episodes of frontier life. The next anniversary of Christmas came round and brought a great change in the affairs of Van Schoonhoven. He had been ill for two seasons and unable to go out trapping. During the autumn, when he had been used to getting in his winter supply of venison and other wild meats, he had been confined to his bed, and the larder was unfilled. The savages were very hostile at that time, and the hunters were all loath to go far from the settlement, so that there was very little provision on hand. This prevented the others from helping out the Van Schoonhovens.

And so it was that when Christmas came round there was nothing for gifts in the Van Schoonhoven cabin and, worse than that, nothing to eat. The principal meat was venison, but there were many birds in the forests, such as grouse, plover and wild geese and turkeys. It was very hard for the Van Schoonhovens to hear the distant calls of these succulent birds while Christmas was approaching and yet not dare to go into the woods to shoot them. Yet this made no difference to the Van Schoonhovens, for the father was confined to his bed, and none of the boys were old enough for hunting.

Christmas eve was a sad one to the trapper's family. For some time they had been living from hand to mouth, and there was nothing to eat in the cabin but some salted meat that had been sent up from Fort Orange—Albany—to relieve the distress at Schenectady. Mrs. Van Schoonhoven had picked the currant bushes during the autumn and made currant jelly, but what use was it with no venison on hand and no maize with which to make bread to eat with the jelly?

Christmas eve the Van Schoonhovens went to bed hungry and with the prospect of remaining hungry the next day. The mother tried to persuade her little ones not to hang up their stockings, well knowing that there was nothing to put in them. But, having an abiding faith in St. Nicholas, they insisted on doing so, and there was a long line of hosiery dangling from the chimney piece. The poor woman cried herself to sleep thinking of her children's disappointment on the morrow.

During the night she was awakened by a crackling of twigs outside the cabin. Thinking that some wild animal was prowling about which might provide a dinner for the next day, she thought of getting up to have a shot at it. But the children were sound asleep, and she did not wish to awaken them. Besides, she fancied, when she heard a soft tread on the roof, that it was a neighbor's cat. So she went to sleep without thinking any more about it. In the morning she was awakened by her little son, Peter, crying:

"Oh, mamma, see what St. Nicholas has brought us!" Glancing at the chimney piece, she saw the stockings were rounded out. But this was only a small part of St. Nicholas' bounty. The immense fireplace was piled with pelts, and on the pelts rested an enormous quantity of game. There were venison in abundance, wild turkeys and many other kinds of beasts and birds.

The children were most interested in their stockings and, taking them down, began to pull out many trinkets, ornaments and apparel, such as head and foot covering. Every child received a pair of beautiful beaded moccasins. But the father was more interested in the bottom pile on the hearth. The sight gave him strength, and springing out of bed he began to pick over the pelts. They proved to be the most valuable kind.

"I know who St. Nicholas is this year!" exclaimed Katrina, clapping her hands joyfully. "Who?" asked her mother. "The Mohican!"

"I am sure you are right," said the mother. "Last night I heard what I thought to be a cat on the roof. Now I think of it, it was more like the tread of a moccasin."

When they went outside they saw how easy it would be for the Indian St. Nicholas to get on to the chimney top even with his heavy load of gifts. But they most admired his stealth in letting himself down the chimney and filling the stockings without awakening them.

Van Schoonhoven was a well man from that moment. His wife supplied several neighbors from her larder, and not only the Van Schoonhoven family had a good Christmas dinner that day, but many of their friends who had been prevented from gathering supplies.

That was one of the happiest Christmas days the Van Schoonhovens ever had, because they had expected to spend it without any means of enjoying it. There was turkey in plenty, but it was wild turkey—not the kind we have nowadays—with venison and quail and other kinds of game.

The next week Van Schoonhoven went to Fort Orange and sold the pelts for double the ransom he had paid for Mohican Anthony. This set him up very nicely, and from that time forward the family was prosperous. On the opposite side of the Mohawk river from Schenectady they still point out to strangers the ground on which the Indians tortured their captives. There is a house near by in the banner of which is a mark made by an Indian tomahawk.

NOTICE OF APPOINTMENT OF VIEWERS.

Notice is hereby given that the Common Council of the City of Coquille, Coos County, Oregon, has appointed L. Harlocker, J. Fred Schroeder and T. J. Thrift as viewers to view the proposed street hereinafter particularly described to be laid out by the said City of Coquille, and has appointed Monday, the 2nd day of April, 1917, at the hour of nine o'clock in the forenoon as the time, and the City Hall in the City of Coquille, Coos County, Oregon, as the place, for said viewers to meet and to proceed to view the proposed street and to determine and assess how much, if any, less valuable the lands or other property or any part thereof through or over which the proposed street is to be opened, laid out and established, will be rendered thereby and to ascertain the respective interests of all persons claiming to be the owners of the lands or other property aforesaid and of the improvements thereon or have any interest in such lands or improvements and the damage which each of said owners respectively will sustain and to make an estimate of the benefits and advantages of such proposed street by the opening, laying out and establishing of said proposed street.

The boundaries and termini of said proposed street are as follows:

Beginning at an iron pipe at the initial point of the town of Coquille being the S. W. corner of block one as laid out and platted by T. B. Willard and running thence north 2 degrees 40 minutes west 262.3 feet to an iron pipe on the west line of Willard (formerly C) street and at the intersection of a City Monument line as established by S. E. Henderson, former City Engineer, and the west line of said Willard (formerly C) street, being on the property line on the west line of said street; running thence north 213.75 feet to an iron pipe, which is the initial point of the said proposed street; turning thence at right angles to said Willard street and running west across the property of the heirs of J. J. Lamb, deceased, a distance of 440.22 feet along the center of a strip of land 47 feet in width which is to be appropriated for said proposed street; thence south at right angles to last course above mentioned a distance of 368 feet to the north side of Front street and along the center of a strip of land sixty feet in width to be appropriated for the said proposed street, and along the property line of the heirs of J. J. Lamb, deceased, Caroline Lorenz and J. A. Collier, on the east of said line, and the property of W. L. Kistner and W. J. Longston, on the west of said line; thence in the same direction across Front street to the north line of a tract of land owned by J. A. Collier, thence in the same direction across the lands of J. A. Collier to the north line of the right of way of the Southern Pacific Company's railroad, thence in the same direction a distance of 16 feet across the right of way of the Southern Pacific Company's railroad; thence in the same direction across lands belonging to the City of Coquille, to low water mark of the Coquille river, this being the terminus of said proposed street; the said proposed right of way being fifty feet in width from the south side of Front street to low water mark of the Coquille river.

The boundaries and description of the private property to be appropriated for the said proposed street are as follows:

A parcel of land owned by James Anderson Lamb, Ada E. Smith, Leona A. Beyers, Mary Marvin Lyons and Florence Irene Jones, heirs at law of J. J. Lamb, deceased, described as follows: Beginning at an iron pipe which is the initial point of the town of Coquille, Coos County, Oregon, being the S. W. corner of block one as laid out and platted by T. B. Willard and run thence north 2 degrees 40 minutes west 262.3 feet to an iron pipe on the west line of Willard (formerly C) street and at the intersection of a city monument line established by S. E. Henderson, former City Engineer of the City of Coquille, and the west line of said Willard (formerly C) street, being on the property line on the west side of said street; thence north 213.75 feet to an iron pipe, said iron pipe being the initial point of said proposed street, the place of beginning of the lands belonging to the above named heirs of J. J. Lamb, deceased; running thence north 23 1/4 feet; thence west 440.22 feet; thence south 47 feet; thence east 440.22 feet; thence north 23 1/4 feet to the place of beginning.

Also a parcel of land owned by said heirs of J. J. Lamb, deceased, and described as follows: Beginning at the southwest corner of the parcel of land last above described and running thence south 94.85 feet; thence east 30 feet; thence north 94.85 feet; thence west 30 feet to place of beginning.

Also a parcel of land owned by W. L. Kistner and described as follows: Beginning at the southwest corner of the parcel of land last above described and running thence south 94.85 feet; thence east 30 feet; thence north 94.85 feet; thence west 30 feet to place of beginning.

Also a parcel of land owned by W. L. Kistner and described as follows: Beginning at the southwest corner of the parcel of land last above described and running thence south 94.85 feet; thence east 30 feet; thence north 94.85 feet; thence west 30 feet to place of beginning.

To find the place of beginning begin at the initial point of the town of Coquille, Coos County, Oregon, being the southwest corner of block one as laid out and platted by T. B. Willard, and run thence north 2 degrees 40 minutes west 262.3 feet; thence north 237.25 feet; thence west 440.22 feet, to the place of beginning; running thence west 30 feet; thence south 268 feet; thence east: 30 feet; thence north 268 feet to the place of beginning.

Also a parcel of land owned by W. J. Longston described as follows: Beginning at an iron pipe which is the southwest corner of block 1 of the original town of Coquille, Coos County, Oregon, and running thence north 9 degrees 33 minutes west to an iron pipe, said pipe being the southeast corner of J. A. Collier's land; thence south 83 degrees 50 minutes west 424.8 feet to an iron pipe, said pipe being the place of beginning; thence north 100 feet; thence west 30 feet; thence south 100 feet; thence east 30 feet to the place of beginning; also any and all lands lying between the above described parcel and the north line of Front street.

Also a parcel of land owned by Caroline Lorenz described as follows: Beginning at an iron pipe which is the southwest corner of block one of the original plat of the town of Coquille, Coos County, Oregon, as platted by T. B. Willard, and running thence north 9 degrees 33 minutes west to an iron pipe, said pipe being the southeast corner of J. A. Collier's land; thence south 83 degrees 50 minutes west 424.8 feet to an iron pipe; thence north 123.9 feet to a point, which last named point is the place of beginning, thence north 100 feet; thence east 80 feet; thence south 100 feet; thence west 30 feet to the place of beginning.

Also a parcel of land owned by J. A. Collier and described as commencing at an iron pipe which is the southwest corner of block one of the original town of Coquille, Coos County, Oregon, as platted by T. B. Willard, and running thence north 9 degrees 33 minutes west to an iron pipe, said pipe being the southeast corner of J. A. Collier's land; thence south 83 degrees 50 minutes west 424.8 feet to an iron pipe, said pipe being the place of beginning; thence north 123.9 feet; thence east 80 feet; thence south 121 feet; thence west 30 feet to the place of beginning; also any and all lands lying between the above described parcel and the north line of Front street.

Also a parcel of land belonging to J. A. Collier described as follows: Beginning at the southwest corner of block one of the original town of Coquille as platted by T. B. Willard and running thence north 9 degrees 33 minutes west to an iron pipe, said pipe being the southeast corner of J. A. Collier's land; thence S. 83 degrees 50 minutes west 424.8 feet to an iron pipe; thence south 0 degrees 56 minutes east 62.43 feet to the south line of Front street which is the place of beginning; thence east along the south side of Front street 43 feet; thence south at right angles to the south line of Front street to the north line of the right of way of the Southern Pacific Company's railroad; thence west along the north line of said right of way 50 feet; thence in a northerly direction parallel with the north and south line of this tract above described to the south line of Front street; thence east 7 feet along the south line of Front street to the place of beginning.

Also a strip of land belonging to the Southern Pacific Company and used by it as a railroad right of way described as follows: Beginning at an iron pipe which is the southwest corner of block one of the original plat of the town of Coquille as platted by T. B. Willard, and running thence N. 9 degrees and 33 minutes west to an iron pipe, said pipe being the southeast corner of J. A. Collier's land; thence south 83 degrees 50 minutes west 424.8 feet to an iron pipe, which is the place of beginning; thence south 2 degrees 40 minutes west 164 feet, more or less to the north line of the said right of way of said Southern Pacific Company, thence east along said north line of said right of way 50 feet; thence south across said right of way to the south line thereof, 16 feet, more or less, thence west 55 feet along the south line of said right of way, thence north to the north line of said right of way, 16 feet, more or less, thence east along the north line of said right of way to place of beginning, subject to the use of said strip of land by said railroad company for its right of way for a railroad.

Dated and first published March 23, 1917.

J. S. Lawrence, City Recorder.

You can still get the four-magazine combination for two bits extra.

Don't forget that our 4-magazine offer at 2 bits still holds good.