

Camp White Vets Make Model Railroad

Museum Planned In Room at VA Domiciliary Here

By SID HOLLINGSWORTH

Railroading as it was perfect during the past century of progress in transportation will not become a lost art if veterans at the VA Domiciliary at Camp White are able to complete the model system for the museum, now being installed in an upper room in the arts and crafts building.

Here a miniature railroad is being constructed from a jumbled mass of parts, units and equipment, acquired by special service under "recovership" proceedings negotiated by the American Red Cross about two years ago.

The donation was accepted and delivered in October, 1955, and when the lids of the containers were opened, the enthusiastic group, anxious to put the railroad together and start operations, discovered they had a real job on their hands.

Map of Paraphernalia

They found the maze of paraphernalia represented an exact replica of a complete railroad, from steam and diesel locomotives, box cars and passenger cars, to the rails and switches, round house and roadbeds, bridges, trestles and signals—all the appurtenances of railroading—ready for assembly in exact reproduction, done to scale.

It was almost too much to expect that the task of building such a system in miniature could be accomplished even at Camp White, where the i.q., especially in creative lines, sometimes runs pretty high. Old railroad men among the membership took one look at the chaotic assortment and gave up in despair.

A few had sufficient daring to start operations and a platform was built while several experts in such pastimes as jig saw, began to piece together the Chinese puzzle.

Rebuild Table

Walter D. Holman is the man who finally succeeded in bringing order out of chaos. He rebuilt the large table on which the project rests, laid out the entire line of track in loops and terminals, crossings and switches. The terrain was landscaped with mountains and a lake, and a highway was made to parallel the tracks.

The tracks themselves provided quite a problem. The tiny pieces of brass were cut to "standard" lengths. Tiny wooden ties in the hundreds were cut and placed. Virtually all of the track is now laid with due consideration for accommodation of the train in rounding curves. A 2 per cent grade was maintained for the climb up to the mountain.

A "roundhouse" facing the turntable has been built at one end. The trains will be operated from this end by electric control. Holman plans on running the trains with two men, one the engineer at the controls, the other the switchman who routes the trains, calling the turn for switches and forward-backward movement.

'Outdoor' Atmosphere

The "outdoor" atmosphere is being worked out as a problem in art. "Peck Henderson, whose murals adorn the walls in several buildings, has helped in the scheme of decoration. Rock-hounds have provided rocks suitable to place around the roadbed. Boy Scouts have volunteered to furnish some of the trees. Most of the material for this part of the task is an extra feature.

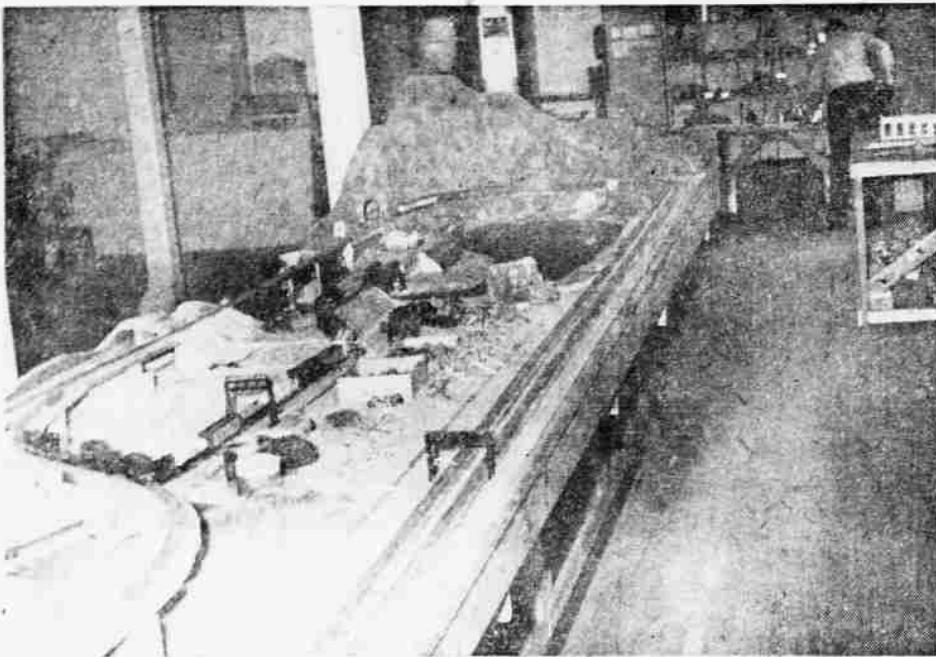
Holman is now putting the finishing touches on some of the elements of the line to add realism in appearance. He is sticking at the job because he wants to see his dream realized of rebuilding from scratch.

The railroad came to Camp White through an offer made by Mrs. D. R. Schumann, of the American Red Cross, chapter 14, Yakima, Wash. It had been set up and displayed in a department store for some time, according to reports. The value of the unit complete is estimated at \$3,500.

A railroad museum is planned by Special Services chief Frank Glomming with pictures obtained and placed around the walls, showing the history of rail transportation.

Highlights in this galaxy include the driving of the golden spike by Sen. Leland Stanford, and the establishment of the standard gauge by President Abraham Lincoln. Pictures of motive power and other features will be included.

There are several retired railroad men in the domiciliary, ready to form a railroad club as custodians of the project, and arbiters of moot points in the story of American railroad development.



MINIATURE RAILROAD — Under construction at the Veterans Administration Domiciliary at Camp White is an exact reproduction of a standard gauge railroad system. Walter Holman has undertaken to build the lines from parts donated through the American Red Cross two years ago. The exhibit will form the nucleus of a railway museum in the arts and crafts building at Camp White. — Jerry Gamble Photo.

Corona Borealis Visible In Southeastern Heavens

By FAY BENTLEY

Sadness reigned in the city of Athens. The hour had arrived when the black-sailed ship with the cargo of human sacrifices must begin the sea voyage to the island of Crete.

The legends is that the Cretan king, Minos, who had defeated the Athenians in battle imposed an inhumanly cruel tribute on the conquered city. Seven youths and seven maidens must each year be sent to the island of Crete to be sacrificed to the Minotaur, a terrible monster, half man and half bull, which lived in a labyrinth or cave filled with great numbers of winding passages. Many people had entered this cave, but none had ever returned.

Accompany Ship

"I shall accompany the next tribute ship and slay this beast," said Theseus, son of the Athenian king. But although King Minos agreed to allow him to meet the Minotaur before the others were sacrificed, he removed the sword of Theseus and locked him up with the rest of the victims.

While the brave young prince was despondently pondering the situation, the door suddenly opened and Ariadne, daughter of King Minos, presented Theseus a ball of string and a sharp sword.

"Fasten this cord at the opening of the cave and let it unwind as you enter. Then after the battle you can find your way out," she said.

Kills Minotaur

The next day, after a terrible struggle, Theseus killed the Minotaur, and by using the cord, was able to return. In gratitude for Ariadne's help he asked her to become his wife. She accepted his offer and the entire group happily set sail for Athens.

Sad to relate, Theseus who was as fickle as he was brave, contrived to leave Ariadne on the island of Naxos where they had stopped for a supply of fresh water. For days the deserted princess sat by the sea waiting in vain for her lover's return.

Venus in compassion for the grieving maiden offered consolation by promising that she should have an immortal husband to take the place of the mortal Theseus.

One day Bacchus, god of mirth and revelry, discovered the disconsolate Ariadne as she sat looking out across the waters of the sea. He calmed her fears and soon the princess forgot the unworthy Theseus and consented to marry this god.

Wedding Gift

As a wedding gift Bacchus placed on her head a crown of seven sparkling jewels. For many years they lived happily together, but after Ariadne's death, Bacchus was no longer content on the island. He decided to leave, but before boarding the ship, he took his wife's beautiful crown and tossed it into the sky where it still shines as the constellation Corona Borealis, or the Northern Crown.

Corona Borealis is a semi-circle of seven twinkling stars, one of which is brighter than any of the others. In form it resembles a capital "C" or a broad shallow horse shoe.

Observed in Heavens By 9 p.m. or as soon as it is dark, this star picture may be observed high in the southeastern heavens, and only a short distance from the top or pointed part of the Kite or Boote.

An easy way to locate the Northern Crown is to start with the last star in the handle of the Big Dipper. Extend the curved line of the Dipper handle downward and to the south until the bright orange-yellow star Arcturus is reached.

After finding Arcturus, look to the left or northwest where the sparkling blue-white Vega will at once engage your attention. A line extended from Arcturus to Vega will cross the upper or open part of the Crown. The distance from Arcturus to the Northern Crown or Corona Borealis is about the same as the length of the Dipper handle.

This constellation is visible all summer but will appear a little farther westward each evening.

There are about 149 varieties of trees in the national forests ranging from the softwoods to the hardwoods.

Patterson Named Grange Coop Manager

Central Point — Donald M. Patterson has been named manager of the Grange Cooperative Supply Association, replacing Earl W. Weaver, who resigned recently.

Weaver has been with the Coop since 1939, during which time the Coop has increased its activities from a small feed and petroleum business with two employees to enlarged facilities with 22 employees.

The Ashland Mills were purchased in 1944, and in 1947 under Weaver's management, the grain elevator in Central Point was constructed. Other additions to the Coop include new office facilities and store building. A bulk tank farm recently was completed for handling a complete line of petroleum products.

Mr. and Mrs. Weaver plan an extended vacation in Canada. His plans upon his return are indefinite, he said.

Dr. Kaufman to Speak At Medical Meeting

Dr. Russell H. Kaufman, president of the Oregon State Medical Society, will speak at a meeting of the Jackson County Medical Society at 7 p.m. Wednesday, June 19, at the Rogue Valley Country Club.

Hosts for the dinner will be Drs. John N. Reid and William M. Sammons of Ashland.

Others making the trip from Portland with Dr. Kaufman include Dr. Harold M. Erickson, state health officer; Clyde C. Foley, executive secretary; Richard G. Layton, assistant executive secretary; Mrs. Oscar Stenberg, state auxiliary president; and Mrs. Merle Pennington, state auxiliary president-elect.

Lowry to Speak at Accountants Meeting

State Sen. Phillip B. Lowry will speak Monday at a dinner meeting of the Rogue Valley Chapter of Oregon Association of Public Accountants. The meeting will be held at Mon Desir dining room, beginning at 7:15 p.m.

Senator Lowry will talk on "Highlights of Oregon's Tax Changes" enacted by the last state legislature.

E. G. Sommer, Ashland, vice chairman of the group, will preside in the absence of chairman Ray Pence, on vacation.

John Harvard, after whom Harvard University was named, was a Puritan minister.

Sun Is An Energy Source to Be Considered In Future, Research for Thesis Indicates

(Editor's note: The following article is a condensation of a senior thesis written by William Warner, who graduated this year from the School of Journalism at the University of Oregon. It is the product of extensive research in solar energy.)

By WILLIAM WARNER

If the world needed awakening to the importance of fuel as a source of power, the stimulus was provided by the recent Suez crisis. When the flow of Middle East petroleum was suddenly cut to a trickle, people realized how dangerous it is to have most of the fuel "eggs" in one basket.

More than ever, men are looking anxiously into the different sources of power. Especially, they're looking for power that cannot be so easily controlled by political forces, and power that can be used when our oil and coal reserves are gone.

For several years a small but active group of scientists and engineers has been concerned about the rate at which we are using up our natural fuels. Their warnings and predictions are being heard.

Oil Need Growing

By the mid-1970's, we will need twice as much oil in the United States as we will be able to produce, and the rest of the world will not be able to meet its own oil needs.

Our eastern bituminous coal beds will be so worked-out that the only coal left will be either low grade, or terribly expensive to mine.

Natural gas production will also be on the decline. Obviously something must be done — but where else can we turn for power?

One energy source to be considered, and indeed the largest, is the sun. It may offer our best opportunity for a continuous source of future power.

Although it is 93,000,000 miles away, the sun bathes the earth in a pool of energy — great amounts of it. One scientist has said that the earth receives enough energy from the sun in just three minutes to equal the entire amount of energy consumed on earth in one year!

At the present time, there are three points of view on the future of sun power:

Special Applications

1. Sun power is not practical in any significant way, except for a few special applications. Nuclear fuels will provide most of the power in the future.

2. Solar energy should be developed as a power source in those areas where its application is practical. Development must continue, since solar energy will eventually serve as an important source of power.

3. Sun power should be put to work immediately, and research should be accelerated. As other fuels become more scarce and expensive, they will gradually be replaced by systems using solar power — ultimately the most practical power source.

In other words, there are the scoffers, the gradualists, and the red-hot.

The scoffers find ammunition in the disadvantages and limitations of sun power.

These are some of their arguments:

Intermittent Nature The intermittent nature of solar energy is a disadvantage. Any given spot on the earth goes through its cycle of day and night. The seasons have their influence too, as do weather conditions. In short, the radiation "falling" on a given area is both intermittent and unpredictable.

Then too, there are geographical limitations. Certain parts of the world are favored with sunshine (during the day) almost year-round, but others, by comparison, receive little usable energy. There are large areas outside the "sunshine" belt that can never hope to make much use of solar power. Great Britain is one example of a country that can expect little practical benefit from sun power. (The belt between the 40th parallel is said to be the richest in usable solar energy.)

A good sunny location is not enough. More problems arise when attempts are made to use the sunshine.

To date, the devices designed to use solar energy are either extremely expensive or very inefficient, or both. Those that use mirror or lens systems for focusing the sun's energy are costly, while those that have "flat plate" or non-focusing collectors have the drawback of low efficiency.

As if the cost of the big lenses and mirrors (which make the device more efficient) were not enough, still more must be spent on moveable mounts and driving gear, so that the device will "follow" the sun.

The problems are not ended with the heat collection phase, since heat storage also poses a problem. Nighttime and cloudy

days interrupt the supply of sunshine, so a storage system is needed to keep extra energy available for use during those times when direct energy is lacking. This costs still more.

Expensive, Inefficient

It has been suggested that solar pumps (pumps driven by solar steam or vapor engines) could lift water into storage reservoirs—thus providing a continuous supply of hydroelectric power, since the water could be released to drive turbines as the power was needed. The scoffers point out that the cost of this plan is only one of its disadvantages — the large area required for the reservoir is another. Not every power-hungry community could provide both the suitable space and the water.

Photoelectric Effect Another system of using solar energy is concerned with photoelectric effect. This is the phenomenon of sunlight causing an electric current to flow in certain metals. Solar batteries operating on this principle have a very limited power output, so their use is confined to low power circuits. Their cost remains rather high. (In 1955, Daryl M. Chapin, co-inventor of the Bell solar battery, estimated the cost of solar battery power at \$60 per kilowatt hour.)

Photosynthesis is still another approach to the fuel and power situation. Trees and plants use sunshine in the production of organic matter which we later burn as fuel, but this process is very slow and inefficient. The laboratory production of burnable fuels by photosynthesis has proven so costly as to be discontinued as an important potential fuel source. One scientist has indicated that some such systems require more power than the value of the fuel produced.

Doubt Practical Ability The scoffers also doubt the practical ability of any photochemical process to produce power from solar energy. A scientist at Massachusetts Institute of Technology used solar energy to decompose water into hydrogen and oxygen, but this was strictly a laboratory process—not the immediate answer to the world's fuel problems.

These, then, are the arguments of the scoffers.

The gradualists, who believe that solar energy will eventually be one of the important future power sources, and the red-hot, who believe that solar energy will become the important source of future power, both base their arguments upon the achievements and prospects of solar research.

Technical Areas There are several technical areas where research has shown that the use of solar energy could supplement or eliminate the use of natural fuels or other power sources. Some of these applications of sun power would make quite a difference in the total power supply—others would not.

Nearly a third of the total fuel energy used in the United States is expended in heating homes and offices. That's more energy than is used for automobiles, industrial power or lighting. In many relatively unindustrialized parts of the world, space heating is practically the only major energy consumer, so we can see its importance in the world power situation.

Solar energy is by no means a new idea in space heating. The "southern exposure" which helps warm a part of a building during the winter months, simply plays an expanded role. Heat collectors are placed on the south side of the building, or on the roof. To these are added a storage system (for cloudy days and nights), a circulating system (to get the heat where it is needed), and a control system. This type of installation can provide most, if not all of the neces-

sary space heat in many localities, but some buildings will still need another type of heat to "carry" them over the long sunless periods.

Another System Another promising system of heating with sun power uses the heat pump. The job of a heat pump is to take energy from a place where it is not needed and put it somewhere else. Our household refrigerators do this by taking the heat out of the food and pumping it (the heat) into the kitchen. The same principle can be applied by using sun-heated water as the heat source and pumping the borrowed energy into the house. In one such installation, a river was used as a heat source, though especially constructed collectors could be used.

Once the solar heat pump is installed, it can be reversed to pump heat out of the house in the summer. Use of sun power to air-condition and refrigerate is ideal, since those locations and times that require the greatest cooling also provide more sunshine and heat. Several systems of solar air conditioning have been experimented with, and one of these units is described as being about as complex "as conventional types of air conditioning equipment" and "slightly more costly."

Water Heating Although cooking, water heating and distillation do not represent a great deal of the total power used, they are areas where some fuel can be saved (and in some cases, the standard of living can be raised) by using sun power to do these jobs. Water can be easily heated by sun power, and it can be done with the same basic equipment used for space heating. Solar cooking, on the other hand, requires special equipment.

Two basic types of solar cookers have been developed. One uses a special mirror to focus solar heat upon the bottom of the pan or pot in which the food is cooking. The other uses the mirror to heat oil, which is then circulated in an oven and piped to a storage tank for later use.

The main purpose of solar stills is to provide a supply of fresh water where there is not now an adequate supply. Glass covered evaporating troughs are used, and the fresh water runs off the glass into a collecting tube. The size of the installation determines its output.

Practical Reality Solar engines are a practical reality for some places and jobs. There are two basic types. One type collects heat and uses it to develop steam in a boiler system—the steam then runs an engine. The other type uses the sun's rays to evaporate sulphur dioxide, which then operates a vapor engine. Either type is suitable for a variety of low power applications.

Furnaces powered by sunshine have been quite successful, and they have produced amazing temperatures—as high as 7,000 degrees Fahrenheit. These furnaces are used mostly for special research and industrial applications.

Actually then, we have three possible answers to the question "What about sun power?" Regardless of the point of view you support, be it scoffers, gradualist or red-hot, you'll find the next 15 or 20 years to be exciting ones in man's continual search for power sources.

Several Road Jobs Under Way in County

Jackson county road crews are working on several road reconstruction projects and finished a similar job on Upper Applegate rd. last Thursday.

County Engineer Paul Rynning said paving of the Upper Applegate rd. will be completed later in the summer.

Crews are building a road from the main highway to the new juvenile detention home near the old county fairgrounds. They are also building a small bridge over Myers creek in the Valley View district near Ashland. They are moving road reconstruction equipment to Evans Creek to complete a project which was started last year but was interrupted by unfavorable weather conditions.

Paving of Tresham lane was completed last week and crews are now improving Kirkland rd.

Jobs Vary Among Students' Fathers

Corvallis — Further evidence that classes of society in America have about disappeared is indicated by the wide distribution of some 150 different occupations of fathers of the 1251 members of the 1957 Oregon State college graduating class. President A. L. Strand believes.

More than 100 of the occupations are in the professional class such as architects, attorneys, bankers, dentists, physicians, engineers and ministers.

But 158 of the fathers are auto repairmen, cooks, firemen, janitors, laborers, loggers, longshoremen, mail carriers, miners, pipefitters, shoemakers, truckers, welders, barbers, bookkeepers, carpenters, clerks, dispatchers, electricians, fishermen, machinists, meat cutters, painters, mill workers and plumbers. Dr. Strand said.

A total of 163 are contractors, executives, lumbermen, manufacturers, merchants, buyers, brokers, salesmen, auto dealers, etc., and 122 are farmers, ranchers, dairymen and orchardists. Thirty-three are teachers, 39 governmental workers and 26 operate small businesses. A total of 188 parents are deceased, retired or unlisted.

Medford Man Arraigned In District Court

Royal Weldon Calkins, 27, of 418 Plum st., Medford, was arraigned in district court Friday after being arrested by state police in connection with the theft of a truck.

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STAR GAZER			
By CLAY R. FOLLAN			