MILITARY HIGHWAY PLAN IS REVIVED BY PREPAREDNESS IDEA

Army Officers Point to Strategic Value of Such Highway Along Pacific Coast.

SHOULD AN ENEMY COME

Landing Can Be Effected at Several Places Along Oregon Coast Alone That Are in Complete Isolation.

The national preparedness movement has revived interest in the long discussed military highway along the Pacific coast from British Columbia to Mexico.

A meeting will be held at Seattle April 10 to consider the matter and to urge upon congress the need of an immediate appropriation to undertake the work. The amount of the appropriation suggested is $50,000,000. Stress is to be laid on the fact that the proposed highway would not only be a military road, but would serve a great commercial purpose.

In 1910 T. W. Harris of Renton, Wash., a civil engineer, published an article advocating a military highway along the Pacific coast, but he aroused no interest in the matter. Interest in the project was revived at the beginning of the present European war, when it was demonstrated that roads were an important factor in facilitating the movement of troops and heavy guns.

At the Pan-American congress, held at Oakland, Cal., in 1915, a resolution was adopted recommending to congress the advisability of investigating the necessity of building a hard surfaced highway along the Pacific coast from Mexico to British Columbia and other national highways, to be used as military and commercial highways.

A number of individuals have from time to time pointed out the importance of such a highway as a national defense, but until lately, with the organization of the Coast Defense league, no concerted effort has been made to agitate the matter.

Colonel Parke Makes Report.

Bearing on this subject, an interesting report was made to the Portland Chamber of Commerce last summer by Colonel J. S. Parke, a retired army officer. He called atention to the following conditions:

First, there are a hundred places along the Pacific coast at which an enemy could make a successful landing. In Oregon there are at least 15 that are absolutely undefended in any manner whatever.

Second, in addition to our navy, which must constitute the first line of defense, there must be suitable land defenses of some kind.

Third, to fortify all or any of these hundred vulnerable points suitably would cost such an enormous sum as to be prohibitive.

Fourth, in addition to being prohibitive, it would take too long a time. It takes years to build a fort that can withstand modern artillery.

Fifth, landings are never made in the face of strong fortifications.

Sixth, historically speaking, landings are always successful. As an obvious corollary to all this, some other method of defense must be devised. The only possible substitute, said Colonel Parke, is a suitable highway paralleling the coast line, connecting all exposed harbors or other landing places along which heavy artillery may be moved quickly, as well as mobile infantry, to delay the landing as long as possible, or until heavy guns can be brought to bear on the ships or transports aiding in the landing. Not only would such a highway serve for the transport of heavy artillery, but sufficient automobiles could be mobilized to put a force of sufficient size at any given point in a few hours to prevent the landing.

"Assuming," continued Colonel Parke, "that our navy constituting our first line of defense had been placed hors de combat, and it became necessary to prevent a landing, or, at least, a foothold, on our coast; let us see what would be necessary:

"In order to better understand how to meet this condition, let me give you briefly a description of a landing of a division of the Japanese army in the harbor of Chinnampo in March, 1904.

By Way of Example.

"Each transport carried several large flat-bottomed sampans, each sampan, closely packed, carried 50 men or a corresponding amount of horses or war material. When filled they were towed rapidly by a fleet of steam launches up to four landing stages about 150 yards long, to which they were attached by the skillful maneuvers of two trained boatmen, who lived in the covered stern of each sampan. On the arrival of each sampan the men disembarked in an orderly and expeditious mannner and marched off at once. The cavalry led their horses ashore and picketed them, then returned for their equipments. The guns were landed very cleverly and were at once dragged by hand out of the way. The pontoons were similarly treated. They arrived in three sections, and when put together, fitted into trollies which were, each of them, pulled by one horse. Under the excellent arrangements in force, about 20 transports were enabled to land men and material simultaneously.

"Each vessel carried a number of little two-wheeled carts, which were put together at once on landing, loaded up with sacks of rice and wheeled off by three or four men to the depots.

"By this means, nothing was allowed to accumulate on or near the piers, or to block the gangways or exits for a moment. The infantry came ashore in heavy marching order. Blue cloth overcoat, thick brown coat, with sheepskin collar; red blanket, knapsack, haversack, water bottle, intrenching tool, shelter tent, spare boots, straw sandals, small rice basket, cooking pot as well as his rifle, belts, pouches and bayonet. This landing was made in a few hours.

"The Japanese division consists of about 20,000, men with 6000 horses."

An Imaginary Landing.

As a concrete example of what might be accomplished by an enemy, Colonel Parke assumed that a landing should be made at Tillamook bay, only 90 miles by rail from Portland.

"There is only one means of rapid communication with Tillamook, and that is by rail, and takes seven hours," he said. "The nearest troops are at Vancouver. Before they could be entrained and reach there, the enemy would have possession of all the passes in the Coast range of mountains, which would give them control of the coast from Astoria to Newport.

"Another landing at Coos bay would give them control of the remainder of the Oregon coast from Newport to Crescent City, with troops still farther away.

"The first thing they would do would be to take possession of every pass in the Coast range and defy Uncle Sam to dislodge them. They would live in the rich country between this range and the sea. Of course, it might be possible to dislodge them in time—but, even that would be doubtful, and would cost more in men and money than to keep them out."

Colonel Potter's Views.

Active army officers have called attention to our defenseless situation. Lieutenant-Colonel Charles L. Potter of the corps of engineers, writing of the proposed military highway, said:

"Such a road would be a great addition, particularly on the coast of Oregon. I speak with some knowledge on this part of the subject, because I have recently had to consider the defense of Oregon and Washington coasts against a foreign enemy. The lack of facilities for moving troops and guns along the shore from harbor to harbor made the problem of proper defense much more difficult.

"The settlements on the Oregon coast grew up around the small harbors when the only communication with the outside world was by sea. As a result, the lateral communications along the coast have never been any more than to connect the various harbors to a railroad, when built over the mountains. As a result, there are fair roads connecting certain harbors into groups, which groups now get an outlet by rail—at Coos bay, at Yaquina bay and at Tillamook bay.

"The roads connecting the harbors in each group are poor from a military standpoint, and between the three groups there are no practical communications. As a result, there would be no way, assuming the enemy controlled the sea, as he must to attempt a landing, to move troops or artillery from one of these groups to another without bringing them back into the Willamette. This would add greatly to the difficulty of preventing a landing, and would probably mean that we would have to allow them to land and take possession of our coast, and then defeat them after they have left the coast and started over the mountains. Then we would have the advantage, since they must march in separate narrow columns, with no lateral roads for mutual support, while we would be guarding the passes by an army having all the roads and railroads of the Willamette valley for lateral communication in its rear.

Requirements of War.

"A good road, on which could be rapidly moved the heaviest mobile guns and large bodies of troops, would probably save us the humiliation of abandoning our coast to a foreign enemy. Such a road would have to be of the best, as to width and surfacing, since heavy guns—formerly considered of a size to require permanent fixed emplacements—are now made mobile, carried on or hauled by motor trucks.

"No estimate of the cost of such a road could be made without a thorough survey and location, and a study of the available points where proper road material could be found."

THE AUTOPED

R. H. Corsen, strolling about on the Autoped, which will be distributed in this city by the Stubbs Electric company.

Have you heard of the new means of transportation called "Autopeding?" It has a peculiar fascination about it that is commending interest from people in all walks of life.

The autoped derives its name from automobile pedestrian, and is a compact little two-wheeled gasoline-driven machine.

The autoped is equipped with pneumatic tires, manufactured especially for it. While riding there is practically nothing to watch but the handle bar, which supports the rider, steers and controls the operation and speed of the machine. One gallon of gasoline is sufficient for 100 miles and the little machine is capable of doing from 20 to 25 miles an hour.

The Stubbs Electric company of this city with offices at Sixth and Pine streets will be the local distributors of the autoped, while other distributors will be placed throughout the state by R. H. Corsen, wholesale distributor.

People May Chip In To Construct Span

San Francisco, March 31.—Plans to inaugurate a campaign for the construction of a general highway bridge across the lower end of San Francisco bay are being made by the Dumbarton State Highway Bridge association, which was recently organized for that purpose.

Publicity work will be started on a large scale, just as soon as members of the association decide upon the quickest and easiest way to create sentiment in favor of the project. One of the plans is to devise a dollar membership for residents of the bay cities to be affected by the proposed improvement.

New Ice and Snow Tractor Is Invented

Machine Designed for Breaking of Roads During the Winter Months; Speed of 25 Miles an Hour Possible.

A new idea in an ice and snow tractor has been invented by two Michigan men. Through the use of this they hope to see the road traffic in this country revolutionized during the winter months.

Instead of wheels, the tractor has four metal drums turning parallel to the body of the machine, and these drums are provided with spiral flanges, which grip the snow and ice. The drums are pointed at the forward ends, in order to enable them to mount drifts and obstacles. The device is steered by means of a runner, which runs ahead of the machine, and is operated by an automobile steering device.

The machine is especially adapted for the breaking of roads, and it is claimed that a speed of 25 miles an hour is possible.

Truck Sales Sign Of Good Business

More than $4,000,000 worth of Packard motor trucks were sold to business men of the United States in January, February and March. Almost every line of business, large and small, is represented among the buyers.

Nearly all these trucks were sold into the industries of peace. A very few orders from the United States army are included in the total, but none from foreign military establishments.

"The prosperous condition of the nation's business probably cannot be indicated more effectively than by this record sale of motor trucks," said W. B. Froud, manager of the truck sales department of the Packard company. "I think the value of truck sales is almost as faithful a barometer of general business as is the price of steel. For trucks are used to transport goods, and when more trucks are bought, it means more goods are moving.

San Francicso Will Have Auto Exhibit

The Commercial Motor Show at San Francisco is to be held this week at the Exposition auditorium, April 3 to 7. In addition to the exhibit of commercial trucks, there will be an interesting exhibit of motor-drawn fire apparatus from the light chemical extinguisher mounted on a motorcycle to a heavy ladder truck, weighing many tons.

Enlargement of Tire Plant Trebles Output

The Ajax Rubber company has just completed the remodeling of the Trenton plant and the erection of a number of new factory buildings which treble the former tire production capacity of the company. The changes were necessary, on account of the widespread and increasing demand for Ajax tires.

The increased production that will follow the plant enlargement will enable distributors all over the country to take care of deliveries in response to dealers' orders. New branches have been opened up in Cincinnati and Omaha. Another branch will be opened in Portland, Me., in the near future.

Hughson & Merton, the coast distributers, announce a bigger business than ever, and are preparing for a big

GOODYEAR COMPANY IS MAKING DIRIGIBLES FOR THE U. S. NAVY

Gas Bags Propelled by 100 H. P. Engines for Use on Land and Sea.

EACH TO CARRY TWO MEN

Speed of 35 Miles an Hour for 16 Consecutive Hours Deemed Possible in Cruising Operations.

The Goodyear Tire & Rubber company has been commisisoned by the navy department to construct and demonstrate nine of the 16 dirigibles which have been authorized for use in coast and harbor patrol.

The contract to make the other seven has been split up among three other concerns, in order that in case of war there may be other concerns familiar with manufacture of dirigibles.

For a number of years the Goodyear Tire & Rubber company has taken an active part in aeronautics, and has cooperated with both the war and navy departments in developing means of national defense. In these several years a number of spherical balloons for training purposes have been furnished; likewise a number of kite balloons for military observations, both on land and at sea.

For a long time some people were under the impression that foreign countries had developed better talent for making lighter-than-air craft than we have here at home. This theory was severely jolted when the 80,000 cubic feet balloon "Goodyear," manned by aeronautic engineers, won the international balloon races out of Paris, France, in 1913. Since that time Goodyear has been foremost among the great rubber companies of this country in the development of aeronautics.

The coast patrol dirigibles which are now being built are of the nonrigid type—that is without interior framework, and are designed to operate from shore bases. They are also designed so they can light upon and arise from the surface of the water in reasonably good weather.

The dirigible envelopes or gas bags, 12 of which are being constructed at the Goodyear factory at Akron, are 160 feet in length and 31½ feet maximum diameter. They have a gross buoyancy or gross lift of 5275 pounds when inflated with hydrogen of good commercial purity, and under normal conditions of barometric perssure and temperature. The motors are to be of 100 horse power, and those used will be of the Curtiss type.

The dirigibles are designed to carry two men each—the pilot and one observer, and will be equipped with radio communication. It is expected that a speed of 45 miles per hour may be maintained for a total of 10 hours. For ordinary cruising, the dirigibles are designed to operate at approximately 35 miles per hour, and at such speeds will carry sufficient fuel and ballast to operate continuously for 16 hours, at heights varying from a few feet from the ground up to a maximum altitude of 7500 feet.

The dirigibles are to be ready for delivery, complete and demonstrated, within about four months, or, in other words, approximately the 1st of August.

Troublesome Valves Discussed.

Some relief valves have the handles set the wrong way, so that the valve shakes open. If one becomes troublesome, replace with one set properly. If this is not desired, the hole may be plugged with a piece of brass rod and a new hole drilled at right angles to the old one.

HOLDS MOST RECORDS, IS MANAGER'S BOAST OF WELL KNOWN CAR

Endurance Run, Mountain Climbing, Long Distance Drive and Economy.

That the Maxwell car holds more records than any other stock car in the world was the big statement made by W. J. LaCasse, northwest manager of the Maxwell Motor Car company. Mr. LaCasse went on to explain that speed records made by specially built racing cars do not interest the average prospective buyer, except as perhaps an item of sporting news.

"Maxwell cars were never intended for race courses," continued Mr. LaCasse. They are built for that great body of conservative people who want a car that will run every day, all day, as fast as they care to drive, and will do this at a low operating cost.

Any stock car that can run for 44 days and nights without a motor stop, covering 22,022 miles of all sorts of city streets and country roads—without any repairs or adjustments—is worthy of a place in the Hall of Fame. The Maxwell is well merited the title of the world's endurance champion."

"Besides that record, we have dozens of others, a few of which I will cite:

"The ascent of Mt. Wilson and Mt. Hamilton, Portland to Spokane, Pittsburg to Philadelphia, Detroit to Indianapolis, Jacksonville to Tampa and many other speed records are held by stock cars. Then there are many economy performances, including the 44 mile run in and around Detroit on one gallon of gasoline. In addition, the test made by Professor Gallup of Worcester Polytechnic Institute prove surpassing economy, endurance and all-around efficiency.

"It is well known that the Maxwell racing cars driven by Rickenbacher during the past year are the very fastest American cars ever built."

Beginners' Mistakes Prove Costly.

One of the many mistakes which beginners frequently commit is to rest the feet on the clutch and brake pedals. It wears out the clutch collar, making it noisy, and may cause the brake to drag, wearing it also. The best position is to have both feet near the pedals ready for instant use.