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The Islands' 17,000 Kilometers of Roads

• *Chiefly built with current tax revenue*

By V. Fragante
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The early history of road and bridge construction in the Philippines is a record of individual effort of the pioneer, the soldier and the priest. As the country developed, a centrally controlled system of administration of road and bridge work and other public works was necessary, and this led to the organization of a Bureau of Public Works in 1867 to study, construct and maintain public works of all classes throughout the Islands. During the 18th and 19th centuries, a very thorough and complete system of roads was laid out and constructed, at least in part. Both road and bridge work was accomplished largely with compulsory labor, each able-bodied man being required to render some 15 to 40 days' work every year. Although a comprehensive system of roads and trails with an aggregate length of about 1600 kilometers was laid out and constructed in Luzon and other islands, they were, with few exceptions, in a very bad state of repair and preservation and were simply impassable in the rainy season. They were rough, but available for travel during the dry season to a limited extent, and when the Government was organized in the beginning of the American occupation, about all that was left of the system was the right-of-way and some 2,600 bridges and culverts, mostly of the usual heavy masonry arch type. The general condition of roads and bridges throughout the Islands during the Spanish time was truly deplorable. Transportation was mainly effected in the mountain regions by "cargadores", and in the lowlands, by pack horses, "sleds" and carabao carts. Natural boundaries generally separated provinces and municipalities and the interchange of products was slow and expensive. Our people were generally satisfied to live and die in the narrow confines of their neighborhoods and villages, unless they happened to inhabit the seacoasts and ventured forth on hazardous voyages in their frail boats.

Thus the early days of American occupation found the Government with the great problem of establishing lines of land communication for the development of the country and as a factor for the restoration of law and order. The first law enacted by the Philippine Commission in this direction was one appropriating one million dollars, gold, to be expended for the construction of roads primarily for strategic purposes, under the direction of the Chief Engineer of the Division of the Philippines. On August 7, 1902, the Commission created the office of Consulting Engineer to that Body, and, on January 8, 1903, it enacted Act No. 584, creating a Bureau of Engineering under the immediate direction of the Consulting Engineer, with the function, among other things, to take charge of the laying out and construction of roads and bridges and other engineering works.

The first major project under the immediate direction of the Commission was the road from Pozorrubio, in the prov-

ince of Pangasinan, to Baguio, in the province of Benguet, to furnish an easy and convenient passage to the highlands of Benguet, where a sanitarium was under construction for invalid civil servants.

In 1905 the Bureau of Engineering was reorganized into the present Bureau of Public Works. This Bureau was originally placed under the supervision of the Secretary of Commerce and Police, and was separate and distinct from the office of the Consulting Architect to the Commission. Ever since the inception of civil government in 1903, attempts had been made to systematize the execution of public works throughout the Islands (with the exception of Mindanao and Sulu, which were still under military rule), but it was not until the organization of the Bureau of Public Works that something was definitely done. Lack of funds, however, prevented any effective progress in the matter of road and bridge work.

In 1908 a comprehensive study of the highway problem was made showing that at that time some 500 kilometers of roads had been reconstructed or improved, none of which had been built to a fixed standard, nor was subject to systematic maintenance. These roads were built to serve the immediate pressing demand for means of communication between the chief centers of population and trade, and as funds were limited, the old Spanish right-of-way was utilized almost without deviation.

During the incumbency of the Honorable Cameron W. Forbes as Secretary of Commerce and Police, he laid down the policy, which we have consistently followed, that maintenance should take precedence over construction and that temporary construction should be avoided. He insisted on the adoption of the regular system of road maintenance which has since been adhered to.

The road program laid down in 1908 was outgrown in 10 years, hence the program of road construction has undergone repeated revisions. The coming of the automobile and finally the motor truck has upset all previous conceptions of construction standards; has rendered the problem of maintenance a matter of grave concern and has increased the demand for good and better roads and the extension of road kilometerage as fast as our resources would permit.

Present figures show that as of December 31, 1936, 16,744 kilometers of first, second and third class roads have already been built and are in use in the Islands. These roads are being maintained and improved following the policy of maintaining routes of communication already established and of constructing new routes as funds will permit until every section of the country is supplied with an outlet for its population and products; the great undeveloped lands in the country

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light leaning downward, the muted horn of his voice gently sounding a theme of oracular authority, the Hoosier Hitler silenced all comers. In the final week of October, not three questions a meeting were bawled at him. The crowds but gaped, their ears yawning, while they heaved with wonder and awe.

McNutt was aboard the Roosevelt Special when it stopped at Gary during the '36 campaign. In the forefront of the station crowd bulged Mayor Barney Clayton, local chief of a Democratic faction that had opposed McNutt two years before. This year he was yet on trial. Fearfully he awaited a sign from the Magnificent One, yielding the President of the United States hardly a glance. At last McNutt leaned from the observation platform and shook the Mayor's hand.

"A nice turnout, Barney," was all he said.

But it was enough for the Mayor. Sweating with relief and pride, he panted to his henchmen: "Did yah hear him, boys? He called me Barney! Paul V. McNutt called me Barney, by God!"

Thus the Hoosier Hitler bestows familiarity as a badge of honor.

McNutt, as I have sketched him, is well known to the conservative Democrats of the Old South, and to the boys of Tammany as well, if not to the blithe spirits writing politics out of Washington, D. C. So does he shine as a shape of hope for Old Democrats everywhere, as they bide their time in the outer shadows, beyond the celestial circle of the New Order. He is adored by the schoolmarms of a thousand institutes and he is revered in as many posts of Legionaires. For nine years, McNutt has been preparing a drive for the Presidency. If his past performances as a strategist, a master of surprise attack, an organizer and dictator mean anything at all, Paul Vories McNutt of Indiana will either lead or break the Democratic Party in 1940.

His acceptance of the Philippines appointment was unquestionably a part of his strategy. With an ocean separating him from the increasing misadventures of the Administration, he may remain unsinged by such hell as that which rages about Frank Murphy and menaces George Earle. When

the fateful year approaches, or when the party factions begin to yell for a leader who may unite them, the McNutt will come home and place himself in the spotlight. Meanwhile, now that he has learned the trick, he may be depended upon to make news. He will be head man or nothing in Manila. In any event, he will remain magnificent until the earth receives him, and even then the grass will doubtless stand at attention about his grave.

The Islands' 17,000 Kilometers . . .

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have been provided with good roads and every barrio has highway communication with the main roads.

The road classification mentioned above is based on the following definition:

First-class roads are well graded and surfaced, thoroughly drained, and constantly maintained; the bridges and culverts are usually complete and permanent. Where bridges are missing, ferries capable of carrying automobiles weighing two tons or more take their places. These roads are continuously passable at all times, with the possible exception of brief interruptions during typhoon seasons. As of December 31, 1936, 9,555.7 kilometers of first class roads were in existence in these Islands.

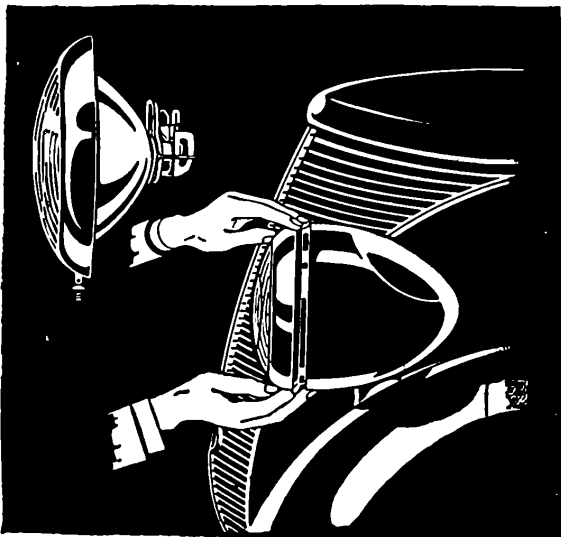
Second-class roads are fairly graded, partially surfaced, and intermittently maintained; bridges and culverts are usually complete, but, in part, are temporary structures. These roads are continuously passable for vehicular traffic during the dry season, and more or less passable in rainy seasons. The country had 5,105 kilometers of second class roads as of December 31, 1936.

Third-class roads are all the traffic routes for carts not included in the first and second classifications, such roads are usually narrow, poorly graded, or not graded at all, and are generally impassable in the rainy season. The kilometerage of this class of roads as of December 31, 1936, was 2,083.2.

As early as 1910, the Chief Executive of the country real-

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The Islands 17,000 Kms. . . .

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ized the necessity of classifying and establishing the limits of public roads, hence the promulgation of Executive Order No. 1 to that effect, thereby fixing the responsibility for the proper maintenance of the roads built or to be built between the Insular, provincial and municipal governments. This executive order was amended in 1929 and again in 1935, and later revoked by Executive Order No. 71, promulgated December 3, 1936.

Under this latest executive order, which took effect January 1, 1937, the roads have been classified into National, provincial and municipal roads, and the responsibility for their construction, improvement and maintenance has been fixed. The Commonwealth Government assumes responsibility for the construction, improvement and maintenance of National roads, the provincial governments for provincial roads, and the municipal government for municipal roads. The policy laid down in this order is in line with that adopted by most of the progressive countries of the world, and it is expected it will enable the Commonwealth Government to carry out the construction and maintenance of roads of national importance in a more efficient and economical manner, prevent local influences from hampering approved programs of work, and coordinate the efforts of all agencies concerned with highway work.

Our people enthusiastically supported from the very beginning the government's program of road construction and maintenance. Our existing roads and bridges already rep-

resent an investment in their construction and maintenance of not less than three hundred million pesos. These lines of communication have given the nation greater solidarity and broader interests in common, and our people have come to realize that they simply could not live their lives in the way they want to live them were it not for the roads. They will always look for good and better roads, for they know that a good road saves money for the man who uses it—it makes money for the man who lives near it. Good roads increase land values because they bring the market and the farm closer together and make the business of farming more profitable. They are an insurance against interruption of food supply, and, by making the schools more readily accessible, they prevent intellectual stagnation of our rural population. In the Mindanao and Sulu provinces where road building has not advanced as rapidly as in other parts of the Islands, wherever roads have been built, their influence on the establishment and maintenance of law and order and the economic development of those regions has immediately become evident.

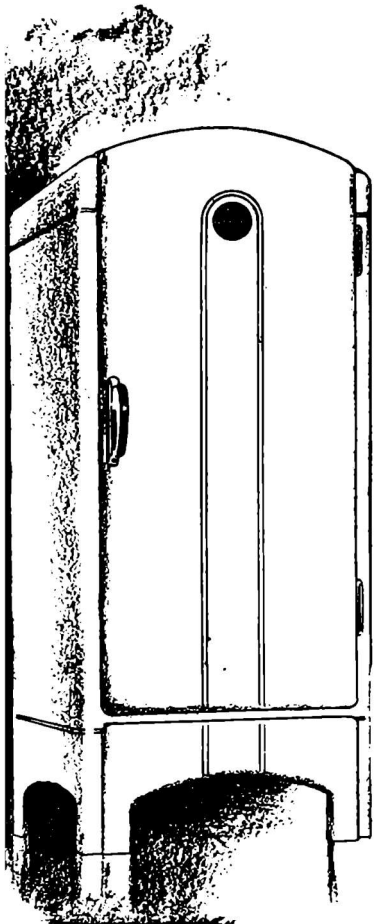
Funds for road and bridge construction and maintenance have been provided through various legislative enactments. There was the cedula tax, enacted in 1907, which, from 1908 to the end of last year, made use of one peso, or one-half of the tax, for road and bridge work in the provinces where the tax was collected as provided in Section 487 of the Administrative Code. This tax contributed over two million pesos for road and bridge work in the provinces last year. There is the internal revenue allotment of ten per centum of the collections from this source accruing to the treasury, which started in 1908 and which contributed about eight hundred

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thousand pesos for road and bridge work last year. (Sections 491 and 493 of the Administrative Code). There is the one-eighth of one per centum of collections from the real property tax which is also devoted to road and bridge purposes in the provinces. (Section 346 of the Administrative Code). This item contributes about one and a half million pesos annually for road and bridge work.

With the popularization of the motor car, the motor vehicle tax law was enacted providing for the expenditure on roads and bridges of collections from motor vehicle registration and licensing of drivers. Collections from this tax started in 1912 with a little over thirteen thousand pesos, but last year's collection reached the respectable figure of nearly three million pesos. Later the "gasoline tax" law was enacted providing for the expenditure of the tax collected on lubricating oil, gasoline, and other distilled products on roads and bridges. Revenues from this source started to assist highway construction and maintenance work in 1927 by three million pesos, but last year's figures show that collections amounted to more than six million pesos.

There is also the annual appropriation act for public works which carries as a general rule a total of at least two million pesos for road and bridge work.

Several provinces have also taken advantage of laws which authorized bond issues for roads and bridges to build important concrete highways and certain bridges which otherwise could not have been financed for many years to come.

On several occasions the Legislature has authorized specific provinces to issue bonds for public works, and it should be recalled that the province of Pampanga took this opportunity to build concrete roads to replace obsolete macadam, while Pangasinan, Nueva Ecija, Laguna and other provinces built important permanent bridges through bond issues. Negros Occidental has recently built concrete roads by means of bond issues and Iloilo has contracted a half-a-million-peso loan and is at present building concrete roads with the money.

The Act of the Legislature which took effect on January 1, 1930, creating a revolving fund of five million pesos for the construction of permanent bridges, the cost of which is to be refunded from toll collections, and the Act authorizing the use of the unexpended balance of nearly three million pesos of the proceeds of the Irrigation Bonds for the construction also of permanent bridges where tolls are levied and collected to refund the investment have made possible the construction of over sixty important bridges, thereby eliminating in many cases the uncertainty of ferry crossings. In order to give further impetus to this manner of financing permanent bridges, the National Assembly last year authorized the National Loan and Investment Board to invest money in permanent bridge construction, the investment to be refunded from toll collections.

The trend of legislation is thus to increase the revenues available for road and bridges work and to build permanent structures, but there is a decided tendency to gradually shift the burden of road and bridge construction and maintenance as much as possible to road users. Probably it may soon be truly said that the driver will have to pay his own way.

The existing system of administration of this governmental activity is as scientifically sound as any abroad and infinitely superior to many. A trained staff of engineers makes all plans and specifications and keeps abreast with the best practice abroad. As funds permit, roads subjected to heavy traffic are being paved with asphalt or concrete; road surfacings are being widened where necessary; curves of short radius are being eliminated; diversions around the "poblaciones" are being built, and bridges being made wider and stronger to keep up with modern traffic requirements. The only obstacle in the way of more and better roads and bridges will be limited resources. While last year over fifteen millions were spent in road and bridge work, in the years to come it is expected that more and more funds would be needed annually for this purpose, not only to give employment to many people, but also to promote the economic, social, and intellectual development of the country.