

# New National Designs for Living

A further survey of the technicians group working under Dr. Manuel L. Roxas, and of their government-financed industrial projects.

We find we have not reported adequately to our readers on new activities of the National Development Corporation, a nontaxed public corporation, through various taxable subsidiaries. The subject deserves broader treatment than we have yet given it, and the men in it deserve some attention. cursory preparations of earlier years are now heading up, and rapidly. Development's offices, under Manager Gregorio Anonas, have been moved to the new industrial site overlooking the river of calle Pureza, and there holds forth an informal technical board under Dr. Manuel L. Roxas. The property is that of the old Philippine Vegetable Oil, and has been acquired on Dr. Roxas's advice from the Philippine National Bank. It comprises 100 acres.

Here the old buildings, all of suitable materials, have been rebuilt and redesigned for new industries. A spinning plant with nearly 11,000 spindles is going in and will be in full operation by the first of the year, as things look now. Next to it is a weaving plant fitted with 104 looms of the very best type, Draper looms from the company of that name at Hopedale, Massachusetts. Four of the looms have the Jacquard improvement for finer fabrics. American experts setting up all this machinery find apt assistants among young Filipino mechanics recruited for employment under their supervision.

We had a little talk with Draper's man, from South Carolina, No. 2 cotton mill state of the United States. We had Dr. Roxas's consent to quizz him. When we asked him what South Carolina was going to do about selling her surplus cotton after he got a few mills like



Dr. Manuel L. Roxas

this set up in foreign piece-goods markets, he said Carolina would go in for finer cottons and rayons—even cotton stalks make rayon stock. According to him, that's the tendency in America.

This man, Mr. Brock, is interesting. His father was an overseer in a Carolina mill, and he took a

two-year course to qualify for handling the machinery. Then he went into a mill, where because he made good he was recommended for the job he has now. Married, he wants to bring his wife to Manila. For eight years he has done nothing else but set up Draper looms in foreign countries: all over South America, Canada, Italy,



Hon. Gregorio Anonas

Syria, some other European countries perhaps, Mexico, and now here. In set up looms in Beyreuth, where cotton goods manufacturing is growing, the boys there first put in a spinning plant to furnish thread to knitters, but the looms and weaving soon followed. You would think these boys would be Syrians, but no, they are Mexicans—the Otero Brothers.

In Bolivia you would look for Bolivians in the business, and you would find Syrians instead—Said & Yarur. W. R. Grace & Co., those wise American merchants who do so much in South America, have large weaving interests there, as in Peru and Chile. In Santiago de Chile, Yarur also has recently set up a big plant. Chileans have a natural bent for weaving and mastery of machinery. So this industry that rises on the Pasig is not unique, as the world now moves. The spindles are as standard as the looms, and able to spin threads as fine as the 120 count. (The old mill on calle Dagupan, a Madrigal property, makes a 24-count thread and goes in for coarse fabrics such as denims.)

Everything should be whirring busily at the new plants by New Year, or shortly thereafter. At least everything is going into place without a hitch. Beyond the looms are other large buildings for the dyeing and printing plants, and dies for prints are on their way from America, together with the 900-bale shipment of cotton we have earlier reported. As many as 700 bales of local cotton are offered, but the start-off will be made with U. S. cotton only, and it is never expected that more than half the lint will come from the Islands themselves, always to be mixed with longer staple from America. However, field experimentation may change this decision, by developing a satisfactory cotton right here in some of the provinces: Batangas, Cavite, Bulakan.

You haven't got round the whole layout yet, because there is to be a rayon plant. One of our covers this month shows rayon fiber from abaca, *musiles textiles*. Here is some of the research by Roxas's group, assisted by Dr. Carlos Locsin at the Victorias Milling Company,



Dr. Vicente Aldaba

Occidental Negroes, where some P150,000 has been spent by Victorias Milling in experimentation, partly in hope of utilizing bagasse. Instead of bagasse, the Roxas group used hemp tow, the tangle and waste from the sorting and baling of Manila hemp. As this is rejected material in the fiber trade, the price is not related closely to ruling prices for marketable fiber. Not long ago a scientific publication opined that alpha cellulose for rayon could not be obtained from Manila hemp, but the experiments came through just the same. Bagasse yields only 10% of its gross weight in pulp from which alpha cellulose for rayon is extracted, but Manila hemp yields 40%, and 92% of this, or better, is alpha cellulose.

That is the laboratory record, on which a commercial plant will be tried. A cost of some P600,000 is involved, but the Roxas group is very confident of results.

Besides the mills, offices, little pilot plants for this and that, and laboratories for running experiments with minimum delays, already there is a recreation hall at National Development's new industrial center, and tennis courts. A cooperative is running with Miss Presentacion Atienza in charge, and a bulletin board advertises a lunch for 15 centavos, soup 5 centavos extra, and a meat course 15 centavos more. Minimum wages are paid and will be paid in all categories, with accident and unemployment insurance arranged for. Dr. Roxas argues that since this mill is to be a model in name, it ought to be one in fact.

Huddles of good storage tanks from the establishment (for expressing coconut oil) will be handy for a distilled water supply for dyeing plant. It is expected

that more goods will be dyed and printed than will be turned out at the mill, and that therefore greys will be imported from the United States. The fact that merchants like to stock a few prints that their competitors don't have does not faze Dr. Roxas, he says these can be provided in the fullness of time — if the mill works out as economically successful.

Any number of girls used to home weaving are procurable in such provinces as La Union, Ilokos Sur, and Iloilo. It is planned to bring them in when they are 18 years old, let them go when they are 22; they should marry, and probably will, and they should continue their weaving either as a village-mill or home occupation. At the Manila mill they are to live in dormitories under matrons; they are to have lessons in books, if they need them, and a stout standard

diet provided out of a common fund.

The looms more than stand comparison with the Toyo loom of Japan side by side under practical factory competition in South America the American loom that the National Development has bought, has won the day: superior performance and *durability*, we are assured.

The spindles are set up in 20 frames each of 400 spindles, and 7 frames each of 312 spindles, a total of 10,184 spindles each of which during 24 hours (it is planned to run night and day in shifts of 8 hours each) will turn out a lb. of yarn, making a total day's output of some 10,000 lbs. of yarn, a year's output of 3 million lbs. or more, or roughly 1,364,000 kilos. This approaches a year's importations of cotton yarns: in 1937, kilograms 138,381 of mercerized yarns worth P178,636 and kilograms 1,562,531 of ordinary cotton yarns worth P1,232,041, in each case no duty added to the invoices. (The duty on the mercerized yarns was P67,645, on the ordinary yarns, P283,223; in the one case 37.8%, in the other 22.9%). In 1937, only 365 kilos of cotton yarns worth P676 came into the country from the United States. Nearly all came from Japan, and the yarns coming from China are described by Dr. Roxas as inferior.



Miss Presentacion Atienza

But demand for yarns will increase at once, in fact a larger demand already exists in a new Japanese textile factory in Sta. Ana that boasts not 100 looms but 600. It is a Kinkwa Meriyasu property and includes the knitted underwear factory moved away from calle Pureza when National Development took over the buildings there. If National Development can sell yarns cheap enough, Kinkwa Meriyasu proposes to buy them.

With its 600 looms, Manila already has a textile industry and that no small one. Its property is carefully isolated from the public representatives, and citizens who have credentials from the main office downtown may see it.

Each of National Development's looms will weave 60 yards of cloth a

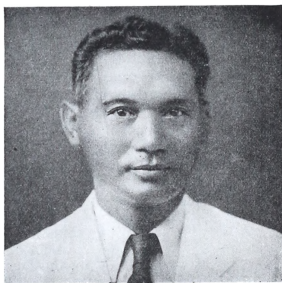
day, more or less, a total output of 6,000 yards a day or around 2,000,000 yards a year. Imports are about 150 million square yards a year (120,000,000 square meters in 1937), and evidently both the Japanese and the government mills will not between them supply 15% of the market. Report is that the Japanese mill imitates the output of Philippine hand looms.

Dr. Roxas says this imitation of Philippine hand weaving also occurs in Japan. It affects Iloilo weavers,

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Santiago Y. Rotea



Hilario Hernares

porcelain and silk, Portuguese velvet and piecegoods, drugs and spices from the Malay archipelago.

"In the main street, slaves were sold by auction. The houses of the rich were surrounded by gardens and palm groves; they were built of stone and painted red or white. Instead of glass, their balconied windows had thin polished oyster shells set in lattice work (the typical Manila window today, borrowed from Goa) . . . The appearance of the Dutch in Indian waters was followed by the gradual ruin of Goa . . . Its trade was gradually monopolized by the Jesuits." A rapid fall of population is recorded between 1695 and 1775, until in 1835 it had been reduced to a few priests, monks, and nuns, and of course, their native dependents. Macao and Manila, though by no means first among the cities of the Far East, are first among the Christian cities here, far and away ahead of Goa, the prototype. But Goa has St. Francis, and St. John is such a holy isle because he died there that pilgrims coming to Manila for the Eucharistic Congress two years ago tried to make a pilgrims' landing there, only the Canadian Pacific liner that carried them found the waters too shallow, the errand vain.

### New National Designs . . .

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whose specialty is the *patadiong* or *sarong*, the wrap-around that no peasant woman will be without. *Patadions* imported from Japan sell 50% cheaper than Iloilo *patadions*, Dr. Roxas says, but the Iloilo weavers have given themselves some protection from this invasion by adding some decoration in rayon that factories have not yet found ways of imitating. So the weavers still sell *patadions* at higher prices than imported ones, but have of course lost a portion of the market. Manchester herself was the first invader of

this Iloilo industry, 80 years ago, through the agency of Loney & Kerr; the first British merchants established there after Iloilo was made an ocean port in 1859. The people were not then importing piecegoods, but wove all they required out of fiber they themselves prepared from hemp, pineapple, manuey and other plants, sometimes adding some silk from China.

Nicholas Loney, influential in the importation of improved sugar machinery, found it feasible to introduce Manchester goods and undersell the handloom fabrics because machinery always outstrips hand tools. Yet for dressing up, *piñas* and *jusis* (pronounced *hoosies*) continued in moder-



Juan T. Villanueva

ate vogue and weavers passed on their art to their daughters, now battling the Japanese with the power of the shuttle for supremacy in the *patadiong* trade. Perhaps all these weavers have a bit of land, mitigating the asperities of their discomfiture in their avocation. The Roxas group feels that it can now help them, with yarns, and to cotton yarns it will try to add rayons.

The group counts 56,000 handlooms in Ilokos, Bohol, Rizal, Iloilo, Mountain Province, Bulakan and other provinces have 13,000. A total of 70,000 handlooms

is estimated, that during 150 days in a year might weave 30,000 square meters of cloth, a fourth of the 1937 imports including piecegoods. But the looms don't do so much. They engage part of the time of 100,000 weavers, but all their work in a year will not be a fourth of the working days. The peasant women who weave also share the men's work in the fields, weaving is done at odd times when nothing better turns up to do. The Roxas group estimates that Ilokos looms turn out only 3,218,000 square meters of cloth a year, worth P1,897,960, and says the weavers fight a losing contest with cheap textiles from Japan. The group says that its new spinning plant will make yarns best suited to the weavers' requirements, and slash these yarns on beams ready to be placed on the looms at a saving of 32% of the labor of home weaving. The group also believes it can improve the loom, effect some practical mechanization, and in time establish in farm communities, as in Japan, small weaving factories utilizing 5 to 10 looms each, with others of 300 to 500 looms each in larger centers.

The group describes this as the European and the Japanese systems, with weaving always distinct from spinning, and remarks that even today at least 40% of Japan's weaving is done in small factories dotting the farm communities. Larger factories doing weaving and spinning concentrate effort on products for export. The group contends that it has a fair chance to get weaving well refounded here without aid of more than existing tariff duties, *ad valorem* of about 25%.

Since raw material is 70% of the cost of finished goods, and Japan imports this material, the Roxas group feels the Philippines has an initial advantage in being able to grow cotton. Plant breeding enters here, but Dr. Roxas says: "We can improve yield and quality (of Philippine cotton) and establish a wider marginal advantage in that direction. Already we have new varieties doubling the yield, raising the ginning percentage and improving the grade of the fiber."

Labor in Japan making a kilo of yarn

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costs 4.8 centavos, 6-1/2% of the landed cost in the Philippines. The same labor here will cost 9.7 centavos, 13-1/2% of the estimated cost of yarn manufacture. Dr. Roxas says small Japanese factories get power for 1-1/2 centavos per kilowatt hour. Small industries here pay 10 centavos, special contracts run as low as 3 centavos, but Dr. Roxas finds the average rate about 6 to 7 centavos. But the plant on the Pasig will have high-pressure boilers and oil-burning turbines making its own power and utilizing exhaust steam for processing, and so producing power at the estimated cost of 1.8 centavos per kilowatt hour. Dr. Roxas says power for the spinning plant can be produced in this way at about twice the cost of like power in Japan, but National Development is looking up hydroelectric projects whose development should lower this cost at factories made accessible to them. Power is but 1% of yarn-production cost in Japan, and will be not less than 1.7% of that cost here, Dr. Roxas thinks, or about double Japan's cost.

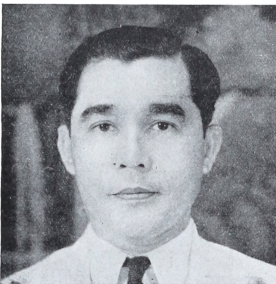
Overhead and fixed charges on yarns, Japan and Manila, are compared as 2.7 centavos per kilo to 10.8 centavos, or 3-1/2% of landed cost to 15% of total cost. Selling costs are rated about equal, the Roxas group feels it can sell as cheaply as do the Japanese houses here.

Summing up item for item and adding duty to imported Japanese yarns of the quality the Pasig plant will make, Dr. Roxas gives Japanese yarn a landed cost of 74.74 centavos a kilo, and his factory cost at 71.81 centavos, a differential in favor of the new plant of 2.93 centavos a kilo. He says this is confirmed by the average landed cost of imported ordinary cotton yarns during 1937. This seems to have been 78.85 centavos a kilo without the duty, and 97 centavos a kilo duty included. Yarns are to be the primary manufacture, in view of these figures, at least at the outset. It seems too that the installment of spindles, just over 10,000, is the minimum unit for economical operation. It is similar with the looms, only 104, each of which will do a stint of 45 yards in a day of 8 hours. The Roxas group estimates 60 yards a day to the loom, of staple goods rather than very fine ones, a bagatelle in the total market.

Now it is time to size up this Roxas group, apparently to be so powerful in shaping Commonwealth policy; not brain-trusters in administrative offices, but in these factories and in the laboratories provided there to run such tests as are practical. The work branches in all sorts of ways. Thus an abaca *central* is going up, in the vicinity of Guinobatan, Albay, where decorticating machines will strip the hemp crop. There is a company for this, National Hemp Corporation. Decorticating machines work on Davao hemp, to see whether they would handle the somewhat different fiber of Albay, a provisional machine was bought and tried out in

the field. Corona machines such as International Harvester has at Madaum, Davao will come later—because 20 tons of stalks of Guinobatan hemp have been sent to Madaum and put through a Corona there. And Guinobatan is chosen as the site of such a decorticating *central* because farmers there are said to have fiber enough among all their nearby holdings to supply such a machine.

The problem is not parallel to that at Madaum, but is described as similar. Dr. Roxas and his group now contend that decorticated Guinobatan hemp will be marketable, and a step in cooperative marketing will therefore be attained in founding



Florentino Talavera

such a convenience. It seems that such conclusions are reached around discussion tables; these young men ready to take a new world on their shoulders sit there, taking up one proposal after another, rejecting this, accepting that, and, after ex-

perimentation, sometimes limited to the laboratory, sometimes more extended, as in the instance of fiber, a plan of action is resolved upon and carried through. (Of course, above all the group, above Dr. Roxas himself, sits Gregorio Anonas for National Development, and even over him, the National Economic Council and its new dynamic chairman, ex-Assemblyman Manuel Roxas, no near kin to Dr. Roxas and a man from the ranks of law-making and administration rather than from the purities of science and research).

This brings us perhaps to the new canning plant at Guagua, Pampanga, on Manila bay. But before leaving the Pasig, take a look at the can factory going into one of the rebuilt buildings, with the latest and best machinery procurable from the United States including equipment for lining the cans against acids. The Roxas group says this is the minimum economical unit for commercial operation, yet it will turn out 72 million cans a year if need be. The process is automatic. The output will first be used at Guagua, for fish and fruits as well as vegetables. These are enterprises of National Foods Company, another subsidiary of National Development. About January, the plant at Guagua will be running. But there is some considerable laboratory output at the Pasig plant.

You now have a ringside seat at a grand little inside fight, gurami imported from Java vs. bangos commonly stocked in the bayside ponds or fish farms up and down the coast. The fry of the one fish prey on the fry of the other, and the Roxas group favors bangos to win because, the group contends, the gurami is not as toothsome as the bangos is. They give you canned bangos from their laboratory runs, and it

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Most of our dogs have been mutts. Ming Toy is, her father was Chow and her mother Pekinese, believe it or not. She is a perfect member of the family, almost able to participate in the conversation; she is so quiet and unobtrusive that for years we supposed she had lost the skill of barking; more recently she will bark, though never loud, if anyone steps into the yard at night, or pauses long in front of the house, though we have no delusion that she would bite, since she willingly laps milk with the cat and shows a proper contempt for such unstable creatures only by wofling more than her share. Nevertheless, if she admonishes, Ming Toy will abandon the dish and let the cat have all. But her look, when this happens, speaks fully of how silly she thinks it is.

Cats, bah! That's what Ming Toy thinks. We are convinced that she condemns their infidelity: cats are loyal to places, not to persons, and dogs reverse the rule. Of other dogs, Ming Toy is so painfully jealous that we can have none about: if we were to bring home another dog, Ming Toy would die, of a broken heart, her implicit faith in man shattered. This speaks in her whole demeanor, and so we never dream of it. Bunk was not quite so much that way, and in time would make friends of new dogs.

Before we got Ming Toy we had Boots for a while, a real Pekinese, called Boots because he had white ones. He was, of course, *her* dog. It makes no difference who may claim ownership of a dog in our household, and it never has; the dogs themselves bestow that favor, and always on *her*. For her and his amusement only, Boots devised the pillow game. It followed his bath, which *she* always gave him. Short-legged, Boots could still leap prodigiously. The pillow game began with his leaping on the bed, seizing a pillow and worrying it. Her part was to get the pillow from him, toss it to neutral ground on the floor, then run for it and toss it back on the bed, if she could, before Boots leaped from the bed and got it first. It was a genuine game, and a most fair one; it worked its participants up the highest pitch of excitement and hilarity every day, honors more or less even, and ended in momentary exhaustion for both, Boots, with triumphant eyes, lying across the pillow and puffing like a bellows, and *she* collapsing on the bed in gales of healthful laughter. Believe us, there was no sham in the game—Boots had invented a real one with ample hazards for each side.

Boots was another of the dogs we have had along the way who never needed a course in manners. But we didn't have

him many years. There was at that time a pest in the neighborhood who habitually drove a station wagon past the house at racing speed. Boot's rendezvous of mornings was a vacant lot across the street, and in time, of course, as if it had always aimed at doing so, this station wagon ran him down, agile and alert as he was. It was painful to let *her* know, and we couldn't bring ourselves to do it until the next day; we had even to go to a dinner that night, out at the neighbors, with the burden on our soul. When Sunday came, in a day or two, we buried Boots, with honors, under a hibiscus out by the playhouse where he had often been a solemn and appreciative guest; and over the little box in which he lay, we read Senator Vest's classic tribute to the dog, Vest's unstudied utterly spontaneous address to a jury in behalf of a poor man unable to fee him a dollar, at a time when his retainers from more fortunate clients were princes' ransoms, an address not merely immortal, but one that won from the jury a costly penance from the man who had wantonly killed Vest's client's dog—the one friend the poor man had in all the world.

Mourners, said Vest, the last rites silent, leave the grave of the most beloved. But a dog lingers there alone, unable to accept the separation... unable and unwilling to understand. And it is true.

### New National Designs . . .

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does taste much like canned tuna. Maybe a compromise will finally be struck, with both fish grown for canning purposes—



Jose C. Espinosa

of course in separate ponds or in separate districts. The effort is aimed at reducing imports of canned fish and canned vegetables, and the Guagua plant is expected to be followed by others, at Iloilo, at Cagayan de Misamis, and at Samar or Leyte.

Guagua's will be the proving plant. The Roxas group thinks it will stimulate production not of fish alone, but of vegetables and fruits.

The niceties of canning Philippine mangoes are giving the group difficulty, to preserve the flavor; fresh mangoes are mangoes sure enough, but canned mangoes, up to date, are more like peaches. Fish at Guagua will no doubt be the main reliance for years to come. A model of the plant stands in the laboratories at the Pasig plant. In these very laboratories you are surprised to see girls sorting navy beans, and still more surprised to learn that these beans grew in Mindanao, where a large supply is obtainable. They are being canned, as pork & beans, not as Americans prefer this dish, but seasoned, partly with garlic, as the Filipino taste runs; and it may not be gaisnaded that the garlic, if your gastric equipment tolerates it, is dietetically desirable. If everything clicks, Mindanao will have a market for its beans and farmers in the Luzon valley a wider market for their hogs—quantities of canned pork & beans will be made and sold.

"I have a little shadow that goes in and out with me," sings Stevenson to the world's children. The Roxas group has such a shadow, and is aware of it—the shadow of Japanese readiness to take a hand in Philippine manufacturing, as already evidenced in textiles. In the end, things may not be so *national* as they are named here at the very beginning, but a shrug of the shoulders suggest that with worst come to worst, at least a foreign factory will hire Philippine labor. Guagua may be an incentive to Japanese, leaders in ocean fishing here, to can fish themselves. If so, they may buy cans; and in any case, the Roxas group's attitude is forge ahead and try for a half loaf if you can't get a whole one. They sit pretty soft, some will say — the government risking all the money and they having quite a free hand. This is true, but not a very broad view; if they fail, the loss of face will never be lived down. We have looked them over a number of times, and have known a number of them a long time, and we rate them responsible rather than irresponsible. They are handling 4 million pesos, but it is certainly no intention of theirs to fritter any of it away.

As the *Journal* said some time ago, they can be given a few honest errors. It is past the stage of debate now, that the country ought to manufacture for its domestic market if this market is large enough to absorb the products manufactured. It is not past debating that the government should do the manufacturing, but as we get it, the Roxas group stands ready to step aside for private capital whenever such capital is prepared to accept the challenge of the governing circumstances. (Experiments in plastics have been run at the Pasig plant. A local

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## New National Designs . . .

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corporation has hinted that it would like to take up this activity, and has been assured a clear field if it will).

But all said and done, the Roxas group is on the spot. This paper is designed to put it there, and so designed with the group's own consent. Which of course implies that whatever faults the group may have, want of confidence is not one of them.

Let's call the roll of the group:

Dr. Manuel L. Roxas is a graduate of the College of Agriculture, U. P., who, with an M. A. degree, went on to Massachusetts Tech. and then returned to his alma mater to run some experiments in cane culture and sugar milling—among other things. He is sometimes dubbed visionary, and may be partly culpable on occasion. But he has been a successful cane breeder, and this means much to the country. At Del Carmen years ago, he crossed CAC 87 with Badilla in a field of 85,000 plants and evolved PSA 14. (CAC 87 was a cross between *talakh* and M 1900, an Australian cane). These experiments gave a variety hardy of growth and notorious for stooling qualities. At Calamba in 1916, it yielded 92 piculs of sugar to the hectare; the average for all varieties was 61 piculs, and of the Javan cane POS 2878, 54 piculs. Dr. Roxas got his chemistry at Massachusetts Tech., his agriculture at the University of Wisconsin.

Dr. Vicente C. Aldaba is the group's industrial technologist. He is now touring the world's textile centers and giving rayons particular attention. He too is an Aggy from Los Baños, with his doctorate from Sheffield Institute, Harvard, for work in botany and textiles. Juan T. Villanueva is the textile engineer. He studied at Massachusetts Tech., around 1924. Hilario Henares graduated in mechanical engineering at the U. P., and took graduate work at the University of Illinois. He was associated with Dr. Roxas in sugar experiments at the College of Agriculture and was later at Isabela Central, Negros, establishing some manufactures there. At Isabela he designed a bag machine, utilizing jute. (To date, Manila hemp as a substitute for jute has proved too harsh).

Dr. Santiago Rotea is a veterinarian formerly employed in the Bureau of Animal Husbandry. He has studied meat preservation in the United States. At the Pasig plant he is in charge of the laboratories. Miss Presentacion Atienza was graduated at the University of the Philippines in pharmacy and has done some work at the Bureau of Science in the department of foods. She too has studied food preservation in the United States and is interested in canning fruits and vegetables here. Miss Atienza is the presiding genius at the canteen and recreation hall at the Pasig plant,

the center of a cooperative among the employees. Jose C. Espinosa is the group's rayon expert. He had a course at Massachusetts Tech. It was he and Carlos Locsin who dug alpha cellulose out of abaca tow to the tune of 40 lbs. to 100 lbs. of gross fiber. Florencio Talavera is the group's fish canning expert. He has worked at the Bureau of Science, but his actual factory experience was gained at Monterey, California.

—W. R.

## America's Prospective . . .

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ly beyond anyone's helping it, outrageous. These 70% having no relief have incomes averaging \$471 a year. The middle third of the total of 13 million families averages family incomes of \$1,076 a year. When the reader recalls surveys of social America dating before the turn of the century, and studies of Middletown (Muncie, Indiana) made in the past decade, with any other similar matter that may have come to his shelves, he can not think of this survey as disclosing conditions at all novel in the national life. The situation has been blowing up a long time. Its mitigation, if practical means are found, would induce a long curve of fine business. The family that gets only \$471 a year and has no relief, wants more and is willing to work for more. Extremes of proffered solutions to this problem must meet on middle ground before, more work permanently turns up.

Meanwhile, population begins tapering off. School enrollment in the United States this September is 100,000 below the enrollment for September last year. From this point on, expanding population will not be basic in expanding markets. The alternative is necessarily an upping of per capita income: more per capita prosperity among fewer people and smaller families. This could result from lower unit prices for wealth produced, if farmers find the way to greater profits from cheaper bushels of grain and cheaper bales of cotton. Higher wages couldn't bring it about, unless accompanied by even higher production per man, since the wealth entailed must derive from the soil. America's situation remains therefore a knotty problem in all circumstances; no large portion of the people will sit down to content itself with poverty, and the neap must follow the full tide evoked by artifice (government spending, new-gadged automobiles, new dinkuses on radios, spread of installment credit) until the system of economy is basically reformed and everyone lives more tolerably from the products of the soil.

Just now it would seem that one of the fuller tides is setting in. Just the same, the maximum of \$5,000 fixed in the bank-deposits insurance act covers 95% of all such accounts. Too many Americans live too close to the line, yet smash would go

their great domestic market if they took a more prudent stand toward life, and they couldn't pick much up in exports. It's a riddle in any man's language.

—W. R.

## U. S. MONTHLY ECONOMIC CABLE

Washington, D. C., October 27, 1938.

### GENERAL

Domestic business conditions improved during September, continuing the progress made since June. Industrial activity increased at about usual seasonal rate, in response to rising volume of orders from distribution groups. Freight car-loadings also expanded beyond the normal seasonal rise, while improvement in building industries has strongly influenced the general trend. Industrial production has recovered to about the level reached last November, with increases apparent in both durable and non-durable goods. The general trend is indicated by the change in steel output, from a low this year of below 25 percent of ingot capacity to nearly 50 per cent at the end of September. The automobile industry has not been a major factor in the rise of steel production to date, but October is expected to bring a sharp advance in automobile production. Activity in consumer goods industries has been well above the mid-summer rate, with production of textiles, leather manufactures and tobacco manufactures showing considerable advances. Demands for industrial fuels such as coal and electric power have expanded, as well as demand for industrial materials for manufacture. Retail trade has improved with the advent of the fall season but the charges in distribution to consumers have not been so pronounced as those concerned with industrial activity.

### EMPLOYMENT

Employment conditions have improved materially since mid-summer and aggregate income payments have moved definitely upward, mainly through rise in payments for labor services. While unemployment increased materially during the latter part of last year and the first half of this year, the number has been recently reduced, but estimates of the volume of unemployment vary because of the difficulties of definition and measurement.

### COMMODITY PRICES

Commodity prices generally moved within a limited range during September with European developments affecting price movements in some sensitive commodities, but Moody's index of 15 important commodities has fluctuated narrowly. Grain quotations reacted to war threats but showed little net improvement from the August lows. Non-ferrous metal quotations were advanced by small amounts and purchases increased. The downward movement of prices for farm

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