

Imported Asphalt No Longer Needed

U. S. Petroleum Refineries Now Supply Country.

Washington.—One more product which the United States formerly imported from abroad is now almost entirely manufactured at home. Recent statistics of the United States bureau of mines show that more than nine-tenths of the asphalt used in this country is made at petroleum refineries, and only 1 per cent is derived from native deposits occurring in various parts of the world, such as the famous pitch lake on the island of Trinidad, British West Indies.

"Asphalt, whether natural or artificial, is a black, sticky substance famed for countless centuries as a binder, preservative, and waterproofing material," says the National Geographic society. "Native asphalt, or pitch, was employed by the ancient Egyptians for impregnating mummy wrappings, while Assyrian boatmen daubed it on the sides of their circular gulfas.

"Nebuchadnezzar used asphalt to smooth the streets of Babylon for the wheels of his gold-plated chariots, but many centuries were to pass before the world rediscovered asphalt's weathering qualities and the ease with which it can be combined with other paving materials. Today asphalt is the binding medium for an estimated three-quarters of American city streets having pavements of a higher grade than untreated macadam.

Has Many Uses.

"In that part of the United States public works \$600,000,000 highway program now completed, or under construction, nearly three-quarters of all highway types above the class of untreated gravel or stone roads are of asphalt, or use asphalt as a binding medium. An equal percentage of all airport surfacing better than plain earth, gravel or cinders consists of the same material.

"Property and life itself are being made safer along the turbulent Mississippi where, only this year, U. S. army engineers believe they have solved the century-old problem of retreating the banks to keep the stream in its channel. Great, tough waterproof mats, impregnated with asphalt, have been laid from low waterline out to the channel, thus literally paving the river bed.

"While an ally of modernity, asphalt also serves as an antidote for modernity's chief nuisance—noise. Twentieth-century nerves are soothed by noiseless asphalt floors and sidewalks, and the sound-absorbing qualities of asphalt-treated roofs and walls. Radio studios use the product extensively.

"The sports world is served by resilient asphalt surfaces for tennis and handball courts, and playgrounds. The arena of the Madison Square garden bowl, in New York, is of asphalt construction throughout—the first place of its kind ever built.

"Versatility for industrial purposes is demonstrated by the use of asphalt for battery box walls, in the heat-resistant enamel of automobile hoods and for moisture-proof shipping containers. Asphalt yields a protective paper for wrapping and is an essential in tree surgery.

"From the work-a-day field of industry to the realm of art is an easy jump for this resilient substance. Asphalt is employed in molding compounds for bas reliefs, frames and other plastic forms.

Composition a Mystery.

"Although the exact chemical composition of asphalt is not known, chemists have found that it consists of a very complex mixture of hydro-carbons and their non-metallic derivatives. Certain of these compounds are heavy, oily bodies, which hold the harder, solid constituents in solution. The oily bodies give plasticity, and the harder bodies provide waterproofing and cementation.

"Asphalt is recovered from the crude black oils of Mexico, South America, California, and some of the mid-continent fields by a simple distillation process. Solvents such as gasoline, kerosene and gas oils are boiled off in the still, leaving the black, sticky, non-volatile asphalt behind. As the oily constituents of asphalt can also be boiled off, it is a simple matter to produce a finished asphalt cement of any degree of hardness.

"Native asphalts, such as those of Trinidad and Venezuela, have been produced over long periods of time in nature's laboratory or refinery. The original petroleum in which they occurred was subjected to a slow process of evaporation which eventually removed the lighter solvent oils. Asphalt also occurs in certain sandstones and limestones, and in a very brittle form known as Gilsonite, in Colorado."

Crime Fight to Go On, Says Cummings

Attorney General Finds Public Demands Action.

Washington.—Declaring the government's war on crime "must go on and must succeed," Attorney General Homer S. Cummings appealed to the American people to continue support. Mr. Cummings said:

"There is no doubt that crime, in its modern phase in the United States presents a most sweeping challenge to our national pride, a challenge to the prestige of government itself.

"Moreover, it is a challenge that

CROCHET AND KNIT

By CHERIE NICOLAS



We all like to ring changes on our wardrobe with a wide variety of hats and trimmings. This is possible, however small your clothes budget, if you set to work and fashion this set crocheted (the neck-piece) and knit (the hat) of mercerized crochet cotton. The hat is a new version of the beret and the collar follows the prevailing mode for high necklines. Color contrast is introduced in the lighter trimming on the collar, which matches the dashing ornament perched over one eye. The other hat, which is called the

To Make Garden of Eden Bloom Again

London.—The Garden of Eden is to bloom again after centuries of desert-like aridity.

A firm of London engineers is backing the romantic project which at an estimated cost of \$5,000,000 will transform the present barren wastes of the traditional site of the Biblical garden in Asia Minor into a luxuriant flowering land.

Plans call for a giant dam across the River Tigris. By controlling the flow of the Tigris, engineers expect to irrigate the land so it will again be productive.

As soon as the spring floods have subsided, work on the dam will begin. The whole project will take three years to complete.

Rattler Broke Fast and Died

Raleigh, N. C.—"Pete," rattlesnake on exhibit at the State museum here, fasted for a year. He broke his long fast with an enormous rat. It was fatal.

SEEN and HEARD around the National Capital

By CARTER FIELD

Washington.—The new plan for government aid for financially sick railroads, to be made possible by bills just introduced with the approval of the administration in both house and senate, is a combination of scaling down the capital structure and government guarantee of bond interest. Originally, as told in these dispatches last year, the plan was to have the government guarantee the interest and principal in return for a concession by the bondholders both as to amount of the principal and rate of interest.

The new plan is a variation of this, not actually in the fundamental question involved, but in the method of approach. As in the first place, it is intended to be applied only to railroads for which there is really some economic hope. It is admitted that there are quite a few which are simply beyond saving, economically.

All the proposed legislation does is to give the RFC the right to purchase railroad bonds, regardless of their maturity date, at the market price. Thereupon the RFC regards the amount paid for the bonds as a debt of the railroad to the RFC and charges the railroad the regular RFC rate. This rate is now 4 per cent.

This would not probably enable the RFC to get anywhere with the situation, were it not for another law already on the books, the new bankruptcy law. Under Section 77 of the bankruptcy act any federal court may direct a scaling down of all classes of security of any railroad if two-thirds of the holders of each class of bonds and preferred stocks approve.

Were it not for the bankruptcy act a small group of bondholders, by refusing to sell at what had been market prices, might either prevent anything being done or force the government or the railroad company to buy them off.

Thus a 5 per cent railroad bond might be selling for 20, but the plan could not be applied because 5 per cent of the holders insisted on being paid par. Many a railroad merger in the past has been blocked by such attempted holdups, and many another has been overcapitalized because the promoters paid too much to minorities.

Hits Sharpshooters

The new proposal strikes hard at these would-be sharpshooters. It would work something like this: The New York Cripple Creek, to take an imaginary name, is a fairly sound railroad, except that it is overcapitalized. It cannot possibly pay the coupons on its general mortgage 7 per cent bonds, or its 5 per cent first mortgage bonds. So that for the time being the bondholders are getting nothing.

As a result, the first mortgage 5s sell down to 40, and the general mortgage bonds sell down to 20. If the railroad company could buy in all those bonds, at those prices, with money borrowed at 4 per cent, it could then emerge from receivership, and earn enough to pay the 4 per cent. Assuming a total of \$100,000,000 on each bond issue, the interest on the general mortgage bonds would be \$7,000,000 a year, and on the firsts \$5,000,000 a year, a total of \$12,000,000 a year. Whereas, the interest at 4 per cent on the market value of the bonds would be only \$2,400,000 a year.

So appeal is made to the bondholders to agree on this plan. If two-thirds of them will consent, the RFC will buy their bonds. They will get something instead of nothing in the way of interest, and from one-fifth to two-fifths of their principal at maturity instead of probably nothing. Not only that, but if they act promptly, they will get practically government bonds, so that actually they need not worry in the future about whether their railroad makes money or not. For another section of the bill authorizes the RFC to exchange its own bonds, which in effect are government bonds, for the securities so taken.

All of which is apt to induce the bondholders to approve, and as only two-thirds need approve to have a court order the plan in effect, the path to reorganization on a sound basis has at least been smoothed.

Cummings on Spot

Attorney General Homer S. Cummings has jumped from No. 10 to No. 1 in the list of most criticized cabinet members since he argued before the Supreme court the constitutionality of what the government had done about the gold clauses.

He is not only being criticized by lawyers outside the administration, but by New Deal insiders. The criticism, as usually is the case, comes from two extremes—those who think he did not make the case strong enough, and those who think he made it too strong.

Instancing the latter viewpoint, a very prominent diplomat, at a recent dinner party, was asked what he thought would be the effect if the Supreme court should rule against the government.

"I would rather ask that question than answer it," he began, in true diplomatic fashion, but then, suddenly, seeing a perfect "out," exclaimed: "but I am inclined to agree with your Attorney General Cum-

mings—that it would mean chaos."

That is exactly the kind of talk the administration does not want going on. Especially as it does not believe the effect of an adverse decision would be anything like chaos.

A representative of important financial interests in Washington has just completed a canvass of a large number of prominent constitutional lawyers who have been practicing for years before the Supreme court as to their opinion of the outcome. A very large majority thought the court would uphold the government. What was appraised as a very intelligent minority did not.

But here is the interesting point about this minority view. It held that the court would probably uphold the right of the government to change the terms of private contracts, but not to change the terms of government bonds.

Just Supposing

Now assume for the moment that the court will rule this way, and consider the results. The government would have to pay gold for its gold clause bonds on maturity. But the Supreme court has upheld the right of the government to commandeer gold at the old price. So that anyone holding such a bond could demand the gold, receive it and then have it taken right away by the government at the old price. The net effect of which, so far as American holders of the bonds are concerned, would be precisely zero.

Foreign holders of such bonds, however, would not be subject to having their gold commandeered at the old price. So that the net effect, assuming all foreign holders demanded and received gold at the old rate for their bonds, would cost the government, it is estimated, less than \$60,000,000. Not so good, but hardly chaos.

What gives that worried look to the treasury tax experts, trying to figure out the next taxes to be advocated toward the end of this session, is not the difficulty of devising taxes which will raise the money in the least painful manner, but the idiosyncrasies—as they see them—of senators and members of the house on this point.

Reciprocity Treaties

Protracted delay in obtaining the reciprocity treaties that were to live up American exports and permit entry into this country at lower tariff duties of goods, which would not do very much harm to American workers, is being widely criticized, especially in view of the high hopes with which George Peek and Secretary of State Hull embarked on the enterprise.

The chief, if not the whole, trouble has been the "most favored nation" clause existing in nearly all American treaties with other countries. Which means to say that if America reduces the tariff on brandy, as a concession to France, for example, America would also have to admit Italian, Spanish, Greek and South American brandies at the same reduced rates. Whereas, none of the other countries might be making appropriate concessions to take more American goods.

At the present moment negotiations with Spain have virtually bogged down. The whole trouble is that it has been found next to impossible to define sherry wine in such a way that only Spanish sherry would be meant.

The Spanish negotiators say, with some point, that cheap—they call them imitation—sherries are produced in many countries, notably Italy, Portugal and Australia, not to mention South America. They are willing to reduce duties on American goods, which would result in a very fair increase in our exports, indeed, according to experts, but only if this country makes a special concession to sherry produced in Spain only.

Which the "most favored nation" clause makes it impossible to do, as our Department of State views the situation.

Causes Mirth

All of which, however, is causing gales of laughter in most of the foreign chancelleries. They say, very privately, of course, that no nation in the world is so utterly squeamish about such things as the United States of America.

But they do not say that to the State department. It seems to be a sort of gentlemen's agreement among the other countries of the world that not even for the selfish advantage of any one of them may that one tip off Uncle Sam to what is going on, lest the effects of that tipping off recoil on them all.

But just as an illustration of what is being done, Britain has special trade agreements with both Spain and Portugal. In those agreements, curiously enough, sherry figures for Spain, and port for Portugal. The agreement with respect to sherry is so drawn that no sherry type wine from any other country is affected. It is done by the simple expedient of defining sherry, as far as the terms of that agreement are concerned, as wine produced in the Xeres district of Spain and exported to Britain from the port of Cadiz!

In the agreement with Portugal the same technique is followed, the district of Portugal being specified, and the port of Oporto.

And yet Britain has "most favored nation" clauses in her treaties. Nor has any nation gotten anywhere protesting against this discrimination against her in favor of Spain or Portugal.

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Yarmouth's Herring



Herring is King at Yarmouth.

Prepared by National Geographic Society, Washington, D. C.—WNU Service.

YARMOUTH, England, is inseparable from the sea—and the herring harvest. Here from October to December, herring is king. Hundreds of steam drifters clutter the harbor of the world's premier herring port. Tackles rattle; trucks and carts clatter over the curing yards with bulky loads of fish baskets and coal; auctioneers cry for bids from local and foreign buyers; and, as a background to shrieking whistles and sundry other noises, there is the constant ring of laughter and chatter of the rhythmic Gaelic tongue. Incoming trains carry into Yarmouth some 3,500 Scottish fisher girls and many hundreds of longshoremen to handle and cure the herring catches.

Here resort also the butchers and bakers and sweetmeat makers, for Scottish palates must be catered to. Churches announce special services, entertainment societies flourish, and shopkeepers display goods to appeal to the fisher folk. Countless window signs urge visitors to "Send a box of famous Yarmouth bloaters to your friends," while candy makers, not to be outdone, advertise "Yarmouth rock, the candy with the fish center." In its favor, however, it should be said the fish center of the candy refers to a colored fish design in the stick rather than to the flavor.

The bustling pageant centers on Yarmouth's water front. Lowestoft, also, a few miles distant down the coast, presents a similar scene of lesser magnitude.

It seems almost incredible that the fishermen should rely so definitely on the belief that the vast herring shoals are at such a specific location at a certain time. But for centuries the fish have appeared with such unerring regularity at their annual feeding and spawning grounds that never has a fishing season been without success.

They May Be Delayed a Trifle.

In some seasons, it is true, their appearance has been delayed for a short time by local conditions of the water and unusual current. Early in the 1933 season unusual conditions did exist to delay the migration. Two large areas of floating organisms (Pleocystis and Biddulphia sinensis), often referred to by fishermen as "weedy water," or "Dutchman's bacsy juice" (because of its brownish color), lay directly across their normal path. Its recognized distastefulness to the fish had halted their progress, but by going around or making a hurried dash through the obstacle, the vast shoals eventually returned unerringly to their old haunts.

The gill nets are about 35 yards long by half that width and are buoyed up to within 10 feet of the surface by inflated canvas pallets. Although usually about 100 nets are employed by each drifter, superstition dictates the use of an uneven number.

Many other superstitions prevail among the herring-fishing hands. Deeply religious, as so many of the Scottish fishermen are, they never like to see a minister come anywhere near their boats. Herring bones have to be disposed of by other means than burning, as an ancient saying runs: "Catch me, kill me, but don't burn my bones."

Catches Are Enormous.

When hauled aboard, many of the nets have the appearance of thick silvery blankets, so closely together are the fish massed. Some of the crews, who are fortunate enough to land all or a greater portion of their nets after long hours of fatiguing labor, come into port with cargoes of from 100,000 to nearly 500,000 herrings.

On the English drifters a share system prevails. Profits are divided into 16 shares, of which nine go to the owner of the boat and the other seven to the crew.

Ashore the catch must be cured, packed, and barreled for shipment.

A comparatively small but increasing portion of the catch is "klondyked"—that is, iced fresh when they are landed—and shipped for immediate consumption. Others are converted into "bloaters," "kippers," and "reds"—all three methods of curing which originated in Yarmouth. Nearly half of all of the landings, however, are pickled

for direct export. The Scottish firms are chiefly, though not entirely, concerned with this latter activity, which accounts in part for the large staff of men and women who come from all over Scotland for the curing season.

The yards in which they work are scattered extensively along the water front and on the Denes, at the lower end of the town. As soon as the lots of herring have fallen under the auctioneer's hammer, carters truck the swills of fish to the yards and dump them into troughs, where they are "zipped," or gutted, and graded.

Working in teams of three, two for gipping and one for packing, the Scottish lassies dispose of the fish with incredible rapidity. A lightning flash of a knife and the herring is tossed back into one of the three grading tubs. Although a small matie is nine inches in length, a matie nine and one-fourth, a matuff nine and one-half, and a full herring ten inches, seldom are the girls in error in grading them simply by sight, as they swiftly handle them. Salted first in the gipping troughs and again when they are carefully corded into their proper barrels, the fish make their own brine.

Kippers and Bloaters.

The kipping rooms present similar scenes of activity, except that in preparing the fish each one is "speeted" or slit through the back, and spread out for a brief salting and smoking. From the brine tubs the speets are put on racks and hung in the smoking rooms on narrow racking partitions, called "louvers." Kippers receive only a brief salting and smoking; "reds" require a longer treatment.

The famous Yarmouth bloater is a lightly salted, briefly smoked, whole herring, prepared for immediate consumption.

When they are not busy with knives in the curing yards, the girls are industriously occupied with the knitting needles. As they walk up and down along the waterfront, sit in knots on the packing barrels, or ride to and from their rooming houses knitting needles are always active.

How many bright-colored jerseys and scarfs they knit to replace the ones that become worn and smeared with fish scales; how many sweaters are knitted for husbands and brothers of the drifters, only an untrifling statistician could contemplate. Even in the town social rooms you see the women knitting.

Great Yarmouth's all-time peak in herring fishing came in 1913, when more than 824,000 crans, or somewhere about one billion fish, were unloaded on her pier!

In 1932 the landings of herring in all of Great Britain's ports came to an aggregate of 1,459,988 crans, valued at about \$10,000,000. Add to these already stupendous figures the countless billions caught by Dutch, French, German, and other fleets, not only full-grown herrings, but as whitebait and sardines, and one asks, "How soon will the herring shoals be depleted?"

Supply Seems Inexhaustible.

For more than a thousand years, however, fishing has gone on over these same grounds without apparent diminution. Although it is estimated that from 8,000 to 10,000 miles of British nets are fishing in the North sea at one time, yet but a fraction of the fish ever become ensnared.

During the years of the World War, when practically all the fishing boats were on patrol or mine-trawling duty, the herring shoals had further opportunity to increase. Lack of markets, not lack of fish, will continue to be the chief source of worry of the herring-fishing industry.

So, year after year, despite unstable markets and fluctuating prices, many of the hardy Scottish and English fishermen will go to sea. Now they ship aboard the Ocean Angler, Busy Bee, United Friends, Brans o'Enzie, Ocean Sprite, Children's Trust, Green Pastures, Violet and Rose, and other steam drifters rapidly becoming obsolete. In the near future, perhaps, they may be hauling their nets over the gunwales of new Diesel-engined ships bearing equally whimsical names.

Exciting Winter Sport at St. Moritz



Devotees of winter sports in Switzerland get a lot out of ski-joring, which is a combination of horse racing and skiing. It is fast and exhilarating, and also it offers opportunity to those who like to place a bet now and then.