in the critical wheat and cotton states, from making maximum use of the soil bank. It should be repealed.

As for the long-range conservation reserve under the soil bank, the Department of Agriculture recently announced that it was going to experiment with a plan whereby farmers would submit their own terms for retiring land. This plan, if successful, would mean both that more land would be put into the conservation reserve and that the government would have some selection of that land.

THE NEW SESSION of Congress probably will be in no mood to examine seriously the realities of the farm problem despite pressure from Mr. Benson. Republicans will be on the defensive because of the unpopularity of the Benson price supports and acreage-limitation proposal. Democrats will be on the offensive, because they know that the anti-Benson crusade is popular and promises to pay dividends in November.

It would be a serious disservice to the country, however, if Congress should throw out the soil bank because it hasn't produced miracles in the short time it has been in operation. Its major weakness is that it has not been large enough in scope to meet the revolutionary technological changes and needs of American agriculture.

Congress should remember that the soil bank, inadequate as the present legislation has proved to be, is a step in the direction of fewer controls, less government fixing, and improved conservation. Above all, a soil bank that is properly financed and administered should make unnecessary the vast expenditures for price supports and surplus storage and disposal.

An effective soil bank, particularly an effective conservation reserve, should enable the farmer to protect his land until it is needed in an emergency or until there is another substantial population increase. It should also make it easier for marginal farmers to retire their acreages and move to the city. At least the soil bank is one way to deal with the huge surplus problems without imposing burdensome controls on the farmer and on the agricultural economy. It deserves a better trial.

France Finds Treasure In the Desert

JOHN H. LICHTBLAU

UNTIL less than a year ago many people, especially outside France, were still skeptical about the French government's enthusiastic claims of how much oil had suddenly been discovered in the Algerian Sahara. It was felt that the announcements on the subject were meant largely for home consumption, as an antidote to the flagging interest in maintaining French sovereignty in Algeria at any cost. Such statements as ex-Premier Guy Mollet's assertion that "Saharan oil, together with atomic energy, forms one of the foundations of our independence," or Saharan Affairs Minister Max Lejeune's claim that in less than a dozen years France—which now must import ninety-five per cent of the oil it requires—would be exporting more than it imported, were thought to be inspired by political rather than geological realities.

This is no longer the case. It is now clear that the Algerian part of the French Sahara is a major oil-bearing area. The current flurry of concession applications from big oil companies throughout the world is tangible proof of this new attitude among the professionals.

THERE IS plenty of room for the newcomers, because France has probably only scratched the surface in the five years since it began to interest itself seriously in the subsurface wealth of its North African territory. Yet it has already discovered three big oil fields—Hassi Messaoud, Edjélé, and Tinguentourine—and two major natural-gas fields, In Salah and Hassi R'Mel.

The reserves of these fields have not yet been fully determined, but Hassi Messaoud alone, the prize find up to now, is definitely known to have recoverable reserves of at least a hundred million tons and probably three hundred million tons (some very optimistic estimates have even mentioned the possibility of a billion tons). This is big even by

Texas standards, where a field one-tenth that size would be considered a major discovery. In fact, the fabulous East Texas oil field, which is the biggest find ever made in a hundred years of U.S. oil prospecting, contains only about twice as much oil as will probably be recovered from Hassi Messaoud. Since the first oil discovery in an area rarely remains the only one, it can be safely predicted that the Sahara will be a major oil-producing center within half a dozen years, though, of course, not on the scale of Texas, the Middle East, Venezuela, or the Volga-Ural area.

One Key for Many Doors

The implications of all this for France are tremendously important. There are two great drains on France's economy. The first is its foreign-trade deficit, which this year is expected to amount to $1.2 billion. Fully two-thirds of this deficit is accounted for by imports of oil and coal, which are bound to rise until and unless France can develop additional domestic fuel sources on a large scale. Eventually, atomic energy may provide the answer, but in the more immediate future France's only hope of reducing its rising energy imports lies in Saharan oil. According to Minister Lejeune, Saharan oil production will amount to eleven million tons by 1960 and twenty-five million tons by 1962. This would be equivalent respectively to one-third and two-thirds of all French crude-oil imports projected for these two years and would, together with the modest but rising oil production in metropolitan France, make the country nearly self-sufficient in the short space of five years. The foreign-exchange savings would amount to almost $500 million in 1962 alone.

The other big drain on France's economic resources is the Algerian struggle. For 1957, military expenditures in Algeria will amount to something like $1 billion. The question of whether France can afford to keep Algeria is therefore beginning to be asked with increased frequency among French taxpayers. So far, only the large Communist Party and the small group around Pierre Mendès-France—each for a very different reason—are publicly supporting Algerian independence. But the mounting costs of the war are beginning to provide the Communists with a far better argument than all their anti-colonialist rhetoric.

In this situation, the Saharan oil discoveries come as a godsend to all those supporting the principle of permanent French sovereignty over Algeria. For now one of their major arguments is that the Algeria of the future will be one of the mainstays of the French economy, providing it with all its oil, plus some twelve million tons of iron ore per year from the newly discovered deposits near Tindouf.

In the international field, it is hoped that Saharan oil will soon end France's distasteful and politically dangerous dependence on the Middle East and Colonel Nasser's Suez Canal. As a principal supporter of Algerian independence, Nasser has, on several occasions, suggested through his radio and press that Iraq, whence France receives the bulk of its oil supplies, should engage in an anti-French boycott as a gesture of solidarity with the Algerian rebels. The significance of this threat was brought home by the 1956 Suez crisis. It is therefore argued that it is not only necessary for France to stay in Algeria in order to have access to Saharan oil; it is equally necessary to have access to Saharan oil in order to stay in Algeria.

There is no doubt that all these points have an impact on popular French thinking on the Algerian problem. They are reflected in the eagerness with which the public, including many small investors, is buying up the stock issues of the new ventures that are formed almost daily to participate in the Saharan oil search. Such zeal as was displayed in October, when a fifteen-billion-franc stock issue for a new venture was oversubscribed within two hours, with up to five hundred people waiting in line in front of some banks, is not exactly typical of the French investing public. Yet it has been typical of nearly all Saharan oil issues since 1956.

The French authorities are now trying to consolidate this confidence by rushing ahead to bring in the first tangible results of the Saharan oil discoveries. They are building a six-inch "baby pipeline" from Hassi Messaoud to a railroad terminal a hundred miles north. The project is expensive as well as uneconomic, particularly since it is only a temporary affair. Furthermore, the quantity of oil it will eventually carry, half a million tons per year, will be an insignificant fraction of France's total oil needs. But if it can be completed and start its flow on schedule, it would mean that from next January on, Saharan oil would actually be delivered to French refineries. It seems clear that the psychological impact would be worth the cost and effort.

In the longer run, France plans to build a major pipeline from Hassi Messaoud to the Algerian seaport of Bougie, and the Edjélé and Tinguentourine fields are to be connected to either the Tunisian port of Gabès or a Libyan port near Tripoli. Normally, France would give preference for the latter project to Tunisia, which belongs to the French franc zone. And, normally, Tunisia would be eager to have the pipeline, since it would provide both transit royalties and a cheap source of fuel, something Tunisia now lacks almost completely. But the political aspects of the Algerian conflict may so distort normal economic considerations that Tunisia, which officially supports the Algerian rebels, may have to refuse France permission to build the pipeline on its soil; or France may feel that in view of Tunisia's political commitments, it may be less risky to build the line through Libya. French negotiations on the project with both countries have just started.

Oil and Blood on the Sand

How much oil will actually flow through any French pipeline while the Algerian fighting goes on is very much a matter of speculation. If the Algerian National Liberation Front, the F.L.N., has anything to say about it, there will be none. In fact, sabotaging France's oil activities in the Sahara has now become one of the F.L.N.'s key objectives. This is stated quite clearly in the declaration issued in October by the F.L.N.'s Coordinating and Execution Committee. It states that "After having created last summer the Saharan Front, the F.L.N. is now extending this front, affirming the preponderance of its military initiatives in this terrain. Thereby, the Co-ordinating and Execution Committee intends to demonstrate the willingness of our people not to let themselves be robbed—by a brigandism of more or less international character—of the riches of Algeria. The prospectors for the black gold must not forget that they must reckon with us."

The declaration was followed within two weeks by the first attack on oil personnel working in the Sahara. The victims were members of a geophysical survey crew of the Compagnie des Pétroles d'Algérie, owned partly by the French government and partly by Royal Dutch-Shell. According to the reports, five civilians and nine Foreign Legion guards were killed during two ambushes.

Even before that, the rebels boasted of a sortie on Edjélé from a base just inside Libya that started a fire at one of the wells. The French say the fire was due to an accident.

The F.L.N. expects to greatly expand this type of action in the coming months. It has formed a special oil committee, part of whose function will be to direct sabotage activities against all Saharan oil installations. It believes that its main chance will come when the first pipeline has been completed. Then the rebels hope to take a leaf out of Syria's book and "interpose" themselves between the oil wells and the sea terminal. I was told this by no less an authority than Tunisian President Habib Bourguiba, who is very close to the F.L.N. leadership and often acts as their international spokesman. He predicted that not a drop of Sarahan oil would leave Algeria for the duration of the conflict, since the rebels could be expected to cut the pipelines as fast as they could be repaired. There is little likelihood that the F.L.N. will be able to live up fully to this prediction. French oil officials concede that the rebels will be able to disrupt the oil flow to some extent, but since France has an army of five hundred thousand men in Algeria, they believe that sabotage can be controlled enough to permit a regular and substantial outflow of oil. A plan has been advanced to build twin high-tension wire fences along most of the 430 miles of pipeline between Hassi Messaoud and the sea, station a detachment of soldiers at each pumping station, and keep the pipeline under continual observation by planes and mobile patrols.

SUCH A PLAN, or any other if carried out on a large enough scale, might well reduce rebel activities against the oil transport to a "nuisance value," one F.L.N. leader admitted to me privately. However, it would create a general atmosphere of fear and insecurity, hardly conducive to the development of a large-scale commercial enterprise like the production and transportation of millions of tons of oil. Besides, it would make Saharan oil a very costly proposition for the French taxpayer, who would have to foot the bill for all such special security measures.

Nevertheless, the oil companies are not greatly upset at the prospect of rebel activities. They are confident that the Algerian conflict will be terminated one way or the other within the next two or three years. They are not at all sure which side will win, but they do know that whoever is the future master of Algeria will want to see the maximum production and exportation of oil. Even if the Algerians should win full independence, they will still have to let the foreign oil companies do the job, since they themselves would be neither technically nor financially able to take over. Furthermore, since the world oil supply can be expected to remain abundant, barring a major war, an independent Algeria would find it difficult to maintain large-scale oil production without an assured French market.

France, it can be assumed, would be willing to buy Saharan oil even if it came from a non-French Algeria: because of the much shorter distance it would have to travel, transportation costs would be lower than for oil from the Persian Gulf. Furthermore, even an independent Algeria could be expected to remain, at least initially, in the French franc zone, as Tunisia and Morocco have done, thus saving France from paying foreign exchange for its oil imports.

The U.S. Companies Move In . . .

It is this confidence of the oil firms that they will come out on top no matter who wins, since they hold the key to Algeria's economic future, that has accounted for the influx of French and more recently of American oil companies into the Sahara. Not unexpectedly, the entry of the latter has set off a flurry of political reactions that are likely to put them squarely in the middle of another fight between Arab nationalism and a European colonial power. Both sides in the struggle expect to use the presence of the U.S. concerns on the scene for their own purposes.

The French were not always eager to let in American or other foreign companies (with the exception of Royal Dutch-Shell, which has been in there all along). Less than a year ago, a French government spokesman declared that American companies would be called in only if the oil deposits turned out to be too big for France to handle alone. Though this has hardly been the case as yet, the French are now so eager for U.S. participation that they sent the head of their oil office to the United States to drum up interest for the Saharan venture. So far, Cities Service, Sinclair Oil, Phillips Petroleum, Newmont Mining, Tidewater Oil, and the Texas Eastern Transmission Company have officially announced that they would like to go into the Sahara.

Although this might appear to be a very good beginning, it has disappointed the French, who had hoped to interest some of the five international giants of the U.S. oil industry —Esso, Standard of California, Gulf Oil, Socony Mobil, Texaco. According to current trade talks, Esso may come in by next spring.

. . . but France Sets the Terms

The method by which American or any other oil concerns enter the Saharan oil drama is based upon a French law under which all companies holding exploration licenses must return half of their territory to the government after five years. This deadline has now been reached for some of the concessions held by Shell and the French government oil companies. Of course, the oil companies can pick the territory that they return to the government. This means that few if any sites where oil has actually been discovered or where there are definite indications that oil is present will be surrendered. But returned concession areas adjacent to sites where oil has been found are also considered very attractive, particularly since the surrendering concern also supplies any geological information it has obtained on the lapsing concession.

Exploration licenses for all concessions (which can be turned into long-term exploitation licenses if oil is found) can be requested by any bona fide oil company which can prove that it has the means to develop them. The final decision is made in each case by the Bureau de Recherches de Pétrole, a French government agency that is also an important shareholder in most of the oil companies already in the Sahara or now trying to get in. The B.R.P. has not yet acted on any of the new concession applications. But it has let it be officially known that it would reject any application from a foreign concern that had not formed a partnership with French interests. Furthermore, foreign holdings in such a partnership would have to be limited to fifty per cent. In order to comply, American companies have now gone into business with such French concerns as the Suez Canal Company, Rothschild Frères, Lazard Frères, and, in most cases, with the government's B.R.P.

THERE ARE various reasons for France's sudden interest in American participation in the Sahara. Some are based on the fact that U.S. oil companies have the best equipment and the most experienced personnel for oil prospecting. Thus they can spare France the need to hire high-salaried foreign technicians and spend dollars on equipment made only in the United States.

Another factor is the marketability of the oil. Most of the big refineries and marketing organizations in western Europe are in the hands of the major international concerns. They can get all the oil they need from the Middle East, where they have their own production. Unless they are in on the oil produced in the Sahara, they may not purchase it.

But the French think it also makes good political sense to let the U.S. oil companies join in the Saharan search. Since nearly all the U.S. ventures will have French government participation via the B.R.P., it will make them direct partners. Though they have not expressed themselves publicly, many French officials and businessmen connected with Saharan affairs privately think that such a partnership would commit the U.S. oil companies fully on the side of France in Algeria, since it would give them a direct stake in the maintenance of French authority over the area. These circles hope that this interest would have an effect on the State Department's approach to the Algerian question similar to that which American oil operations in the Middle East have on U.S. policy there.

An Insatiable Octopus?

Not everyone in France agrees with this strategy. To a good many Frenchmen, the mental image of a foreign oil company is still that of an insatiable octopus. They are con-

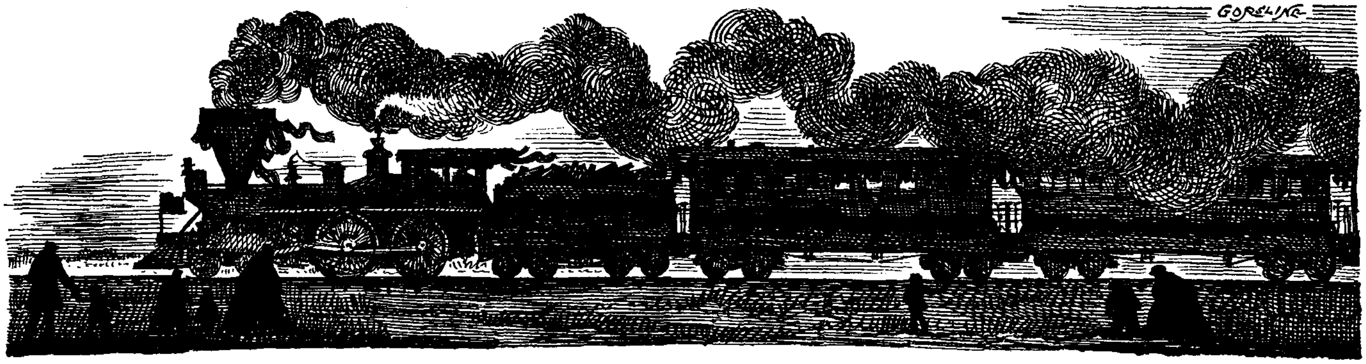
vinced that the Americans would soon squeeze all French oil interests —and eventually France itself—out of Algeria and make it another Saudi Arabia. French officials who have direct experience with U.S. and British companies reject this as a naïve and very exaggerated notion of the political power of the international oil industry. Since the Americans, and also the British, are evidently quite eager to get into the Sahara, these officials believe it is better to let them in now under French terms than to block them arbitrarily from exploiting this rich new area. Excluding them would only play into the hands of the rebels, who are eager to make common cause with anyone who, for whatever reason, wants to get the French out of Algeria.

IN FACT, there are plenty of rumors, both in Paris and in North Africa, that the rebels have already offered some big foreign companies future concessions in return for present financial and political support. A short while ago, the French press reported that evidence of such a deal with the U.S.-owned Aramco had been found in the possession of F.L.N. chief Mohammed ben Bella, who was arrested in Algeria after the French forced down the plane on which he was traveling from Tunis to Morocco. The "evidence" was never published and the government soon played down that part of the ben Bella incident, although it was given new prominence when repeated before a U.S. Congressional committee by that self-appointed fighter against U.S. foreign involvement, Hamilton Fish. If any "evidence" did exist, it could only have been an unintelligent forgery, since Aramco is limited by its charter to operations in Saudi Arabia.

Whether the F.L.N. has actually started secret talks with any foreign oil company is, of course, not known. However, its repeated insistence that it would not consider itself bound by any of the French concession agreements, once it took over in Algeria, is probably meant to encourage such talks.

THERE IS NO DOUBT that the American and other foreign firms that are going into the Sahara strictly for business reasons sincerely hope to be able to stay out of the area's political entanglements. If an early compromise can be reached between France and the F.L.N., which is still not impossible, their hope may be fulfilled. If not, they will find themselves in the middle of an increasingly bloody conflict in which their equipment will be sabotaged and some of their employees will be killed.

If and when that happens, it is likely to have political and diplomatic repercussions far beyond the confines of the oil industry.



VIEWS & REVIEWS

This Year Of Such Great Change

WILLIAM HARLAN HALE

THIS YEAR they put USS *Wisconsin,* the last of our battleships, away in mothballs, and the life-adjusters in education followed it soon after into oblivion. This was a year, in fact, when an extraordinary number of survivals as well as illusions were finally laid to rest. It was hard to see some of them go. With others the parting was less difficult and even highly opportune.

Not only admirals lamented the passing of the battleship. Amateurs with an eye for history and good ship lines regretted it too. As its form finally became perfected over the years, the old battle wagon was a thing of stalwart handsomeness and even grace—a remarkable balancing of immense weight and thrust upon a shapely and meaningful hull. The aircraft carrier that replaces it as the ruling instrument of sea power remains an ungainly cigar box on the water, and nobody has done anything to make the monstrosity look more sea-minded and more plausible. At any rate, there are many who say it may not be with us long.

A generation ago, when I was a boy living in an old-fashioned apartment above Manhattan's Riverside Drive that boasted a huge bay window, we used to gather behind the glass with a telescope and Mother's mother-of-pearl opera glasses to watch the United States Battle Fleet come steaming up North River on its recurrent visits. There were sometimes ten, even fifteen dreadnoughts and what we called "superdreadnoughts" in line on those occasions, the ships all dressed with flags from stem to stern, crews manning the rails, bands playing, and then, upon a signal hoist from the flagship, the whole line dropping anchor simultaneously and coming to rest in midstream in a swath of white backwater as all engines went astern.

Those were great days for a boy in a bay window. The danger of Japan hadn't yet arisen, so we could keep the fleet at home and look proudly at it. Dad, who was inclined to be a pacifist and grumbled at the cost and size of the Navy, couldn't help joining us and looking too—though he remarked how much handsomer the white ships of the Spanish-American War had appeared when *he* was young. Farewell, last battleship; good-by to all that. An aircraft carrier is so clumsy that it can be handled in the North River only with the help of humiliating tugs.

The Army, for its part, also announced in 1957 the retirement of its last burden-bearing mule and its last carrier pigeon. Years ago, just when we were getting into the last world war, modern-minded congressmen of the House Military Affairs Committee snorted when they learned that the Army was still harboring mules and pigeons. It turned out that the mules became of inestimable value in the mountain fighting in Italy, where no trucks could bring up ammunition, and that the pigeons also helped when our finest electronics systems failed or had to be silenced. Good-by, mules. Good-by, pigeons.

Permit me Latin—a subject we still learned in my day:

Sic rerum summa novatur
Semper, et inter se mortales mutua vivunt.
Augescunt aliae gentes, aliae minuuntur . . .

What Lucretius (for the benefit of those who never had to struggle with him in the original) is saying is, "Thus the sum of things is ever being renewed, and mortals live one and all by give and take; some races wax and others wane."

Railroad in Retreat

This applies even to railroads. A few weeks ago the Baltimore & Ohio, finding itself sorely beset because *rerum summa novatur semper,* appealed to state public-service commissions to let it discontinue its traditional New York-Washington passenger service. Airplanes, private cars, busses, and the rival Pennsylvania had done it in.

For generations the B&O, the oldest railroad in the land, had contended with the upstart Pennsy for the cream of the traffic to and from the nation's capital. President-elect Lincoln, on the way to his inauguration, had arrived in rebellious Baltimore and let his car be furtively shunted in the dead of night through the B&O yards to avoid trouble—perhaps the