of them expressed a preference for the assertion of Governmental authority.

Although the conservation of oil is a policy of the Administration, it may be reluctant to employ methods of safeguarding this wasted National resource that might be interpreted as price-fixing. On the ground that it would fix prices in violation of laws governing inter-state commerce, the Attorney General in April denied the request of the oil industry, made through the American Petroleum Institute, for permission to limit production in 1929 to that of 1928. The interest of the oil companies in restriction is obvious. Overproduction—estimated at 485,-000,000 barrels annually and increasing at a rate of 12,000 barrels weekly—has resulted in a lowering of prices threatening the industry's financial welfare. The request this year duplicated requests of previous years by the larger companies, whose voluntary efforts to restrict output are partly frustrated by independents.

While every one professes to favor conservation, few seem willing to bring it about. The Administration fears to take steps on a National scale that might seem to move toward the "State Socialism" against which the Republican party warned the country during the Presidential campaign. The oil industry itself is prevented from taking steps by the rigorous demands of competition. The States seem unwilling to agree to any program that might reduce their revenues from production, as has already been done by the executive order prohibiting the leasing of governmental oil lands. No one seems especially concerned for the consumer, to whom conservation might mean future good but present evil in the form of increased prices for fuels and lubricants.

Lunar Sunrise

MAKING A MOVING PICTURE of the sunrise on one of the vast craters of the moon without a moving picture camera is a fascinating feat just accomplished at the Department of Astronomy at Princeton. Only those comparative few who have frequent access to a telescope of modest dimensions are in a position to realize that a sunrise on the moon is fully as striking as one on the earth; but that, unlike the one on the earth, a lunar sunrise can be witnessed over an entire chain of mountains and plainsprovided one is a patient observer. The moon rotates on its axis extremely slowly—only once in about four weeks. To observe a sunrise over a single range of craters therefore requires many hours of presence at the telescope.

What the Princeton astronomers have done is to make a series of photographs on motion picture film through a telescope at the rate of one exposure every six seconds instead of the sixteen exposures a second of the ordinary "movies." When the film is developed and run through a film projector at normal speed the apparent effect is to accelerate the lagging satellite's rotation by about one hundred times. Similar motion pictures of Jupiter, making



REPARATIONS EXPERT J. P. Morgan, one of the American delegates on the experts' committee

sensible that planet's rotation, were last year taken by Professor Wright of Mount Wilson Observatory in California. Here the entire planet was photographed instead of a local patch as has just been done with the moon.

Lunar shadows are unlike earthly shadows-there are no gradations between brilliant illumination and none; there is no twilight. The very second an object on the moon ceases to lie in direct sunlight it is in pitch darkness. The same would be equally true on earth but for the refractive effect and other effects of our atmosphere.

Every feature larger than a five-acre lot can be seen on the moon by means of telescope; lunar maps made by astronomers are actually more accurate than maps of the earth. All considerable craters are named, and their geography

is as familiar to the astronomer as that of his home State. The crater photographed at Princeton is named Copernicus and is 56 miles in diameter.

Restricted Immigration

THE SENATE has made reasonably certain that the national-origins immigration plan will go into effect on July 1. Barring unforeseen developments, after this month immigration will be further restricted by about 11,000, and will be reapportioned to correspond with a cross-section of our population. At present, the quota for any country consists of 2 per cent. of the number of natives of that country who were in the United States in 1890.

The aim of the national-origins plan, to preserve the country's racial proportions, is defensible enough, though difficult to realize, since the proportions will change even under the new immigration regulations. There is no way of keeping birth rates and death rates constant for the different racial stocks. However, the primary question has concerned the practical disadvantages of changing the present smoothly-functioning immigration law, which fulfills its fundamental restrictive purpose, is well understood, and generally satisfactory. It seemed the wiser course to avoid the inconvenience, bitterness, and jealousy which shifting the source of the stream of immigration in favor of Great Britain and to the disadvantage of Germany, the Irish Free State, and the Scandanavian countries may bring

But if the national-origins plan has come, it is to be hoped that, at least, it has come to stay for a while. Restriction is too ticklish a question to be trifled with. The fact that this is the third system to be applied in nine years' time is reason enough for it to be regarded as lasting.

Farm Relief and Tariff

THE SENATE'S SURRENDER on the export debenture plan was not unconditional. The movement to include debentures in the tariff bill foreshadows another controversy. Since the House is overwhelmingly opposed to debentures, small hope can be entertained of incorporating them into the tariff bill. The purpose of debenture advocates is perhaps rather to draw a deadly parallel between collecting from the Treasury a bounty on exports and collecting from the consumer a bounty on imports.

Protests from foreign countries against proposed tariff increases continue to flood the State Department. Although tariff revision was undertaken ostensibly in their interests, the farmers' uneasiness lest increases in rates on manufactured products offset those on agricultural commodities is reflected in Senator Borah's unsuccessful effort to restrict revision to agricultural schedules. The growing hostility of the consumer is manifest in a petition, signed by thousands, forwarded from the Middle West in protest against higher rates. Governor Fisher of Pennsylvania finds the rates for metals, glass, and other prodnets of his State "satisfactory," but otherwise there has been little praise of the House revision.

Much of the farmer's antagonism to the tariff may be placated if it can be shown that his interests can be fully protected under the new farm relief law, enacted in the form the President desired. The gigantic task of making the measure work now rests on the Administration. The law assumes that the farm problem is primarily one of marketing, but the marketing problem plainly proceeds from over-production. Will a Federal Farm Board be better able than the individual farmer to solve the economic riddle posed by surpluses in virtually all the major crops merely by providing, with \$500,000,000 of public funds, a new marketing system? If not, what pressure will it be able to bring upon the individual farmer to reduce his acreage? No Administration in recent years has shouldered a greater economic task than this.

Party Disunity

IF THE DEMOCRATS cannot endure many more "harmony" dinners like that in honor of Jouett Shouse, the Republicans cannot endure many more special sessions of Congress.

Western Republicans, including many who gave yeoman service during the campaign, have assailed the President's agricultural program and deserted him in two major legislative contests. They have also denounced the tariff plans of the "Old Guard" and threatened another rebellion.

Increasingly they seem to suspect that Hoover's election did not end what they denounce as subordination of agricultural to industrial interests. They comment sarcastically on the President's pledge to place agriculture on an equal-

ity with industry. They hold him responsible for not curbing the House appetite for increased tariff rates.

One of the President's few defenders has been Senator Allen of Kansas. Senate stalwarts-Watson, Fess, Smoot, Capper, Bingham and the rest-sat silent or slipped away as he faced the fire of sharpshooters like Borah, Brookhart, and Carraway. Reed of Pennsylvania led the fight to reject the President's plea for repeal of national origins. Leader Watson disappeared while the vote was being taken, and again the President suffered a legislative reverse.

The President may find some solace



GENERAL BRAMWELL BOOTH Son of founder, and former leader of Salvation Army, who recently died in London

in the disunity among his party's opponents. Democrats who attended the dinner to Mr. Shouse were denounced by the Simmons-Cannon-Heflin faction as deserters who had accepted Smith-Raskob leadership. Though some Southerners came to the table, none dared mention the leader who polled 16,000,-000 votes last fall. Tammany's prominent chieftains-Senator Wagner excepted—remained away. Chairman Raskob's promise of funds and a permanent headquarters at Washington stirred little enthusiasm. How much, may be judged from a speech subsequently delivered in the House by one diner, Assistant Whip Box of the Hoovercratish State of Texas.

The Raskob régime, he declared, would have the party abandon its fight for individualism, for a just distribution of taxation, for a moderate tariff. It seeks to "change the party into an instrument of the Association Opposed to Prohibition," and of groups hostile to immigration restriction. His denunciation, it appears, represents a threat as serious to Democratic rehabilitation as the threat of Republican Insurgent economics is to the success of the Administration.

The Census of 1930

THE NEW CENSUS MEASURE, besides authorizing a counting of the population, provides for automatic and painless reapportionment of House seats henceforth. After each census, beginning with that of 1930, the President shall inform Congress how many members each State is entitled to under reapportionment of "the then existing number of Representatives"—at present 435. He must also submit three choices for Congress to take in reapportionment under the new census: the last-used system, the "major-fractions" method, and the "equal-proportions" plan.

Should Presidential urging fail to move Congress to keep its House in order, each State becomes entitled to the number of members shown in the method of reallocation used in the "last preceding reapportionment." change becomes effective after the next census tabulation, and lasts until a new reapportionment measure is enacted.

The census enumerators will begin ringing doorbells on May 1, the House winning out in its demand for postponement from November, 1929, to the Spring. Rural members maintained that the Autumn count would find everybody present in cities but not in small towns and farming districts. The job is to be completed in eight months.

The census measure calls for a "census" of population, irrigation, drainage, distribution, unemployment, and mines. Beginning with 1935, and every ten years thereafter, there is provided a census of agriculture and livestock. This shall show acreage of farm land and of the principal crops, as well as the number and value of domestic animals on farms and ranges.

Dr. Julius Klein of the Department of Commerce says that investigation of the distribution of merchandise, with ascertainment of channels through which commodities flow and classes of purchasers to which they appeal, will present the first picture of a mass-producing and mass-buying people. It is expected to disclose shifts and growths