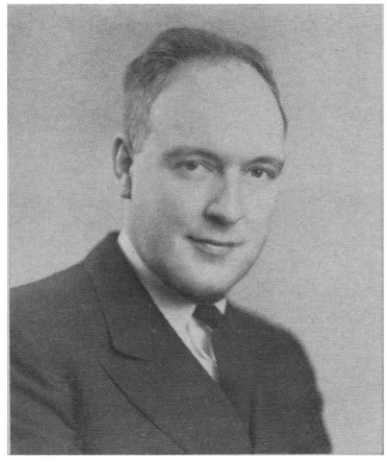
New Surgeon General

President Johnson last week appointed William H. Stewart as Surgeon General of the Public Health Service. On confirmation he will succeed Luther L. Terry, who resigned to become vice president of the University of Pennsylvania. Stewart, 44, a PHS officer since 1951, became director of the National Heart Institute in August, with the rank of Assistant Surgeon General. Prior to that, he had been Assistant to the Special Assistant to the Secretary (Health and Medical Affairs) of PHS. A native of Minnesota, Stewart attended the University of Minnesota, and received his medical degree from Louisiana State University in 1945.



William H. Stewart

stripping include limitation of the width of the bench to 250 feet. Where a slope is 30 degrees or more, the limit would be 95 feet. To help control runoff and erosion, areas immediately below spoil heaps must be left undisturbed. The width of these areas must increase with the steepness of the slope.

These are draft regulations, and no changes will be made until after a second set of hearings, to begin 5 October, when opponents of the regulations are to be given their innings and are expected to ask for modifications.

While the new regulations are still in the mill, the state Strip Mining and Reclamation Commission (the state's policy-making body on strip mining) set a significant precedent this summer by refusing to grant a permit to a coal company to strip-mine 10 acres in Defeated Creek Valley in Knott County. The rejection was made chiefly on the grounds that the reclamation plan submitted by the company made no adequate provision for relocation of the creek and a county road and for protection of surrounding land which would be affected by the operations. The application had earlier been turned down by the Division of Strip Mining and Reclamation in the Department of Natural Resources, the chief enforcement agency for the strip-mine law. It was the first such refusal.

Opposition to the new regulations, based on their economic effects, has been growing. Opponents argue that the proposed regulations would put some strip-mine operators out of business in both eastern and western Kentucky, but contradictory views on this are easy to find. In July an anti-anti-strip-mine group called the Association to Save Jobs and Industry was set up, claiming to be acting in the interests of 8000 salaried employees—equipment operators and service people involved in strip mining in eastern Kentucky. A motorcade of coal trucks to Frankfort, the state capital, was scheduled, but this was called off when the holding of hearings in October, after a cooling-off period, was agreed to.

For the outsider, strip mining offends the eye and the sensibilities so sorely that there is a temptation to ignore the arguments *for* strip mining. To do so, however, would be to ignore the facts of life and of economics in the mining regions.

In eastern Kentucky strip mining has become a symbol of wanton destruction. Viewed in perspective, however, strip mining is but the latest and most conspicuous abuse of the land in a sorely abused part of the country.

Eastern Kentucky, it must be emphasized, is not a rural area in the ordinary sense. The mountain counties are the most heavily populated in Kentucky except for a few counties in which the larger cities are located. Despite the Dogpatch image, most people live on the flat. They are concentrated along the highways and streams of the bigger valleys and the gravel roads and creek beds of the hollows and "coves." Farming today provides a livelihood for a relatively limited number of those who live in eastern Kentucky. The birthrate and the emigration rate are very high, and the population is dominated by the very young and the old. Social Security and federal surplus-food, aid-to-dependent-children, and unemployment-insurance programs keep eastern Kentucky from slipping from the status of a depressed area to that of a disaster area. In terms of industry, however, in good times and very bad, coal has been king in eastern Kentucky for more than half a century.

[The history of the region has been recounted forcefully and feelingly by Harry Caudill in *Night Comes to the Cumberland* (see *Science*, 6 Sept. 1963). A lawyer from a mining county, Caudill as a state legislator was active in the cause of conservation and education reform and has been involved this year in the moves against the broad-form deed.]

The ravages of strip mining have to be looked at squarely. But it should also be remembered that for generations eastern Kentucky farmers "cropped out" the land or cut timber and burned off the brush in a way that exposed the thin soil on the steep hills and allowed it to wash into the creeks and rivers.

On the score of stream pollution, the effects of terrain and local habits must be noted. Modern plumbing and trash collection are rare outside the towns in eastern Kentucky, and there is a well-founded saying that everything goes into the creek. The North Fork of the Kentucky River, which runs through Hazard in Perry County, is said to have a concentration of coliform bacteria which in some places is too high to count. Acid drainage into the water inhibits bacterial growth, so garbage and sewage do not decompose as quickly as they might. In Hazard, which draws its water from the river, a water treatment plant takes care of the bacteria, but people worry because the purification system does not insure removal of viruses.

Strip mining and particularly auger mining contribute acid to the pollution burden of the streams, but state officials estimate that 75 percent of acid pollution orginates in underground mines, particularly in abandoned deep mines. And the same thing is reportedly true in western Kentucky.

Whatever the esthetics, strip mining