MAKING SLAG HOLDERS—One of the steps in making the containers that hold the fiery tons of molten slag dumped from open hearth and blast furnaces is shown here. Workmen of the Mackintosh-Hemphill Co. are making sure the silica facing sand covers all pattern surfaces, inside and outside.

ENTOMOLOGY

Spruce Beetle Menace

Engelmann spruce stands, valued at $50,000,000, are threatened by unexpected and sudden upsurge of beetles as result of 1949 tree-uprooting windstorm.

➤ A SENSATIONAL uprising of the Engelmann spruce bettle has resulted in one of the most damaging insect outbreaks ever to occur in forests of the northern Rocky Mountains, Department of Agriculture officials report.

Engelmann spruce stands, valued at $50,000,000, are threatened by the sudden and widespread beetle epidemic. In some areas, 90% of the trees have already been infested and killed by the bean-sized insect. Spruce is a good, all-around softwood, about fifty million board feet being cut each year.

The amazing quantity of insects breaking out now results from beetles bred in a tremendous number of spruce trees uprooted in a violent winstorm that swept the northern Rocky Mountain area in November, 1949.

Large-scale efforts are being made to salvage the beetle-killed spruce. Lumber companies are pushing their logging and sales efforts toward the salvage and marketing of the extraordinary large volume of spruce. Dead spruce trees can be used for lumber for three or four years after being killed.

The epidemic centers in the Kootenai National Forest in northwestern Montana, the entomologists report. Although an increase in spruce beetle infestation had been predicted following the 1949 blow, the suddenness with which it appeared and the widespread nature of the rampage within the last two months, far exceeded the forecasts.

Federal, state and private foresters are now surveying forest stands to find out exactly how serious the outbreak is. Not new to the western forest country, the beetle has been successfully fought in Colorado by hand-spraying infected trees with an orthodichlorobenzene-fuel oil mixture, called "goop" by the entomologists.

Montana insects, it is feared, may not respond to the same treatment, since spruce trees there have thicker bark and the beetles are therefore more difficult to reach with the mixture. Montana's spruce trees also grow taller, thus possibly many of the beetles may be up beyond the reach of present equipment.

Both time and research into the insects' habits are needed to figure out a program adequate to control the spruce bettle in Montana, the entomologists state.

Science News Letter, September 6, 1952

MEDICINE

Soaking in Hot Bath Still Good Medicine

➤ SOAKING IN warm or hot baths, advised by physicians centuries ago, is still good medicine in the opinion of Drs. Igho H. Kornblueh and George M. Piersol of the University of Pennsylvania Medical School, Philadelphia.

At the American Congress of Physical Medicine meeting in New York, they urged development of the nation's mineral springs into health spas of the European type.

Spas, they said, provide ideal settings for psychosomatic treatment, and patients enjoy the hotel instead of hospital atmosphere.

Science News Letter, September 6, 1952

ENTOMOLOGY

Insect Who's Who Gives Help for Farm or City

➤ A VERITABLE Who's Who of insects has now been published. Whether you are a city housewife worrying about a new, strange bug on the kitchen floor or a farmer wondering how to protect the apple crop or a little girl trying to collect and feed grasshoppers, you will get help from this book.

It has color portraits as well as biographical sketches of more than 50 important insects. It has black and white pictures of many, many others. It tells what insects attack, what they like to eat, what to do about them. Most farmers will want it alongside their plow, but all of us could read it with profit because, as entomologists say, the insects will get us all if we don't watch out.

This valuable and beautiful new book on insects is the U. S. Department of Agriculture's Yearbook for 1952. You can get your copy from the Government Printing Office, Washington 25, D. C., for $2.50, or order it through SCIENCE SERVICE. (See SNL, Aug. 30, p. 140.)

Science News Letter, September 6, 1952

BIOCHEMISTRY

Blood Stain Traced By Serum Identification

➤ IF YOU want to know whether the blood in a blood stain came from a dog, deer, man or beefsteak, the Wisconsin Alumni Research Foundation in Madison can supply the specific immune serum for identification. The Foundation laboratories are also making identification tests employing the serum.

Material is now available for tests for horse, beef, human, sheep, pork, dog, cat and deer serum and the stock will be expanded as others are prepared on request.

The material is now shipped with dry ice but it is hoped that eventually it can be freeze-dried and sent throughout the world without difficulty.

Science News Letter, September 6, 1952