

remote points and these displacements may be due to tension, compression or torsion.

By attaching a small mass to the external detecting arm of the tube it can be converted into an accelerometer. By the use of elastic bellows fluid pressures can be measured. By using large calibrated proving rings, its range of meas-

urement can be enlarged indefinitely and it has proved useful as an accessory to limit and tolerance gauges.

Because it is able to follow vibrations up to 200 cycles a second it can be attached to an oscillograph and thus produce a visual pattern comparable to the motions of the tiny detecting rod.

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POPULATION

Biggest Migration in World Is Chinese Trek to West

40,000,000 People, Including More Than 30 Universities And Their Students, In Mass Escape From Invasion

IT IS impossible to realize, for those who have not seen, but China's vast wave of refugees moving West now totals 40,000,000.

Estimating this migration—which is the biggest transplanting of human beings in world history—at 40,000,000 is conservative. So declares Dr. David C. Graham, curator of the West China Union University Museum of Archaeology, who has returned to America from the part of China which is suddenly and dramatically invaded by farmers, merchants, teachers, millions of all classes fleeing from areas of Japanese invasion.

"A year ago," said Dr. Graham, "West China had received 30,000,000. Probably another 10,000,000 have come this year."

Despite lack of funds and other handicaps, the Chinese are amazingly resourceful at organizing their new boom area, Dr. Graham has observed. More than 30 universities driven out of East China are established in the West. Farmers from East China find themselves in the bread basket of their great country. Rain-fall is heavy enough to make droughts rare. And farmers can plow and sow with less fear of flood, too, since when the Yangtze overflows in this hilly region, it does far less damage than rivers in the flat East. Many Chinese business men have come West bringing their factory hands and machinery to make a new start.

"The intelligentsia of China are thronging West with the other pioneers," says Dr. Graham. "Leaders who got their education in Columbia University and other American schools are establishing up-to-date schooling for the children. China is far-sightedly conserving

her skilled people. University graduates who volunteer to fight have been told that their duty is to teach soil conservation or whatever other special knowledge they have to give."

China's 400,000,000 people are determined to resist Japanese despotism, and given a ghost of a chance they will become a democratic nation, Dr. Graham is convinced. A potential democracy of so many millions in the Far East is a factor which the Western World might well consider seriously, he points out. China, if thrown back on Soviet Russia too long for aid and supplies, may drift toward communism, but the picture of democratic government is far more attractive to the Chinese than is that of communistic rule.

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MEDICINE

Pneumonia Control Speeded By New Diagnostic Method

LATEST aid in the fight to save pneumonia-threatened lives, especially among children, is a new, speedy diagnostic technic which can shorten to six hours or less the time before starting effective treatment. Details of the new technic are reported by Dr. Franklin D. Poole and Miss Mildred D. Fousek, of the New Haven, Conn., Orphan Asylum and Yale University School of Medicine. (*Journal, American Medical Association*, Nov. 18)

Rapid typing of pneumonia germs found in the patient's sputum, in order to determine which type of anti-pneumonia serum should be used in treatment, has already been accomplished, but often in children and sometimes in adults delay still occurs because of difficulty in obtaining sputum for the test. The New Haven scientists have gotten around this difficulty by applying the usual speedy typing technic to material obtained by swabbing the patient's nose.

The method is valuable, it is pointed out, even though many pneumonia patients are now treated with the chemical, sulfapyridine, instead of with anti-pneumonia serum, because it is desirable for the doctor to know whether the pneumonia is caused by a pneumonia germ or by the streptococcus.

Small doses of sulfapyridine given for a short time in treatment of pneumonia in children are recommended by Drs. Charles Hendee Smith and Rosa Lee Nemir, of New York, in a report,

