

The range at which they are expected to come into action, 300 yards, reemphasizes the reduced distances at which modern hand-gun actions are fought. The day of massed rifle firing at objectives a thousand yards or more distant is over. Machine guns, mortars and infantry-accompanying howitzers take care of that part of the battle now. So although the regular service rifle is capable of long-range fire, it is seldom called upon to deliver it. A lighter weapon able to produce results at 300 yards has range enough to be really effective in at least the infighting stages of present-day combat.

The carbine may be the answer to one of the problems that has plagued artillerymen for many years. In an effort to find a weapon suitable for close-up defense of their guns against unexpected breakthroughs, artillerymen have been equipped with practically everything from bolos to regular infantry rifles. Side-arms are ineffective at any but the shortest ranges, and rifles are awkward and in the way of the gunners' regular job. The handy little carbine, which can be kept slung across the back and doesn't weigh enough to bother, looks closer to the right prescription than anything that has yet been tried.

*Science News Letter, August 16, 1941*

## PUBLIC HEALTH

## Sleeping Sickness Outbreak Spreads to Four States

### North Dakota, South Dakota, Minnesota and Colorado Now Report Cases; Infantile Paralysis Now in North

**T**HE sleeping sickness (encephalitis) outbreak is spreading. Four states have reported cases to the U. S. Public Health Service.

In North Dakota, where the outbreak started, the cases were fewer for the week ending on Aug. 2. There were 54 cases there as compared with 65 for the week ending July 26.

But Minnesota reports 35 cases in that state. In South Dakota there were 19 and in Colorado, three.

The cases in North Dakota were scattered generally throughout the whole state instead of being concentrated mostly in Cass County as they have been previously. Of the 54 North Dakota cases reported for the week ending Aug. 2, only eight occurred in Cass County.

Infantile paralysis is also spreading. In the southern states, where the outbreak has been most serious, a decline in

the number of cases is reported. But increases have been reported for New England, Maryland, New York, New Jersey, Pennsylvania, Ohio and Illinois.

New England had 16 cases during the week ending Aug. 2, including four in Maine, five in Massachusetts, one in Rhode Island, and six in Connecticut. In the previous week there were only four cases—two in Massachusetts and two in Connecticut. Before that there had been none.

Maryland had 14 cases, as compared with three the previous week, and of these nine were in the city of Baltimore.

In Pennsylvania, the number climbed from eight to 15; New York from 11 to 12; and New Jersey from two to five.

Ohio reported an increase from 11 to 16; Illinois from four to 13; and Michigan from seven to eight. Indiana had a decrease from eight to five.

California, which has been having a small number of infantile paralysis cases right along, reported a decrease from nine cases in the week ending July 26 to eight for the week of Aug. 2.

The total number of infantile paralysis cases for the week ending Aug. 2 was 326 as compared with 302 for the previous week. The increases in the North more than offset the declines in southern states. In Alabama and Georgia, where cases have been most numerous, cases have dropped from 58 (in Alabama) and 79 (Georgia) to 49 and 71. Tennessee reported a decline from 24 to 13 and Kentucky from 11 to seven.

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## INVENTION

## Wire Pipe Filter Keeps Tobacco Dry

**A** SPIRAL of stainless steel wire, which fits into the bottom of a pipe bowl, acts as a simple filter, so it keeps the tobacco dry and prevents particles from clogging up the tube. (*Patent Products Co., Milwaukee.*)

*Science News Letter, August 16, 1941*



### MASS PRODUCTION

*These are Airacobras on the assembly line at Bell Aircraft's new plant at the Niagara Falls Airport. Fuselages in dollies move steadily up the line by means of a hook connecting the dolly with the moving chain flush with the floor. At each station there are bins holding the parts to be assembled in the plane at that point. Provision has been made for the operation of five more assembly lines in this building.*