

MEDICINE

G.G. Failed To Halt Polio

Committee of experts concluded that "beneficial effects were not demonstrated" in use of gamma globulin to prevent cases or to lessen severity of attacks of infantile paralysis.

► **GAMMA GLOBULIN**, or G.G. for short, given last year to hundreds of thousands of children and grown-ups as an anti-polio weapon, failed to show it could halt the disease, either by preventing cases or lessening the severity of the attack.

"Beneficial effects were not demonstrated either in the inoculation of family associates of polio cases or in the mass inoculation of children in epidemic areas," a committee of experts asked by the Public Health Service, Department of Health, Education and Welfare, to evaluate the data collected last summer, concluded.

Some 250,000 youngsters got G.G. shots in the mass inoculations, and tens of thousands of other children and adults were injected with the substance after coming into household contact with diagnosed polio cases. During the year 1953, the National Foundation for Infantile Paralysis spent \$5,500,000 in March of Dimes funds to supply 5,000,000 cubic centimeters of G.G. for allocation by the Office of Defense Mobilization. The March of Dimes pledged it would triple this supply in 1954 at a cost of \$19,000,000.

Observation of the 23 communities in which mass inoculation with G.G. was done last summer did not give enough information for the Public Health Service's evaluating committee to conclude whether or not gamma globulin had an effect in preventing or alleviating the disease when used in this way.

In most of the cities where gamma globulin was given on a mass basis to all children last summer, the inoculations were given after the peak of the epidemic had been passed. So there was little chance to show an effect of gamma globulin in modifying the epidemic.

To show the efficacy of gamma globulin under conditions of mass inoculations would, in the committee's opinion, require larger experience with greater opportunity for scientific observation.

"The 'family contact' use of gamma globulin, where members of the household of a polio case were inoculated as soon as the illness was recognized, did not measurably reduce the number of subsequent paralytic cases in these households," the committee reported.

"No measurable effect on the severity of the ensuing paralysis" was found in those persons who came down with paralytic polio after getting gamma globulin because they were exposed to the disease through another case in the same household.

The committee was made up of 20 experts, including leading polio researchers and some state and city health officials.

The evaluation program was sponsored by the Public Health Service in collaboration with the Association of State and Territorial Health Officers, the American Physical Therapy Association and the D. T. Watson School of Physiatrics, which is affiliated with the University of Pittsburgh School of Medicine.

Science News Letter, March 6, 1954

AERONAUTICS

Aircraft Brake Fluid Used to Put Out Fires

► **AIRCRAFT BRAKE** fluid can be used as a fire extinguishing agent by a slight alteration of the chemical content, research by Dr. Bruce R. Mead of the University of California at Los Angeles has suggested.

Halogen compounds, chemicals often contained in brake fluids, are believed to be effective fire extinguishing agents. If applied when the flame has just started, they may break a link in the chain reaction of combustion.

The studies were made for the National Advisory Committee for Aeronautics because of the fire hazard in aircraft accidents. The majority of casualties in such accidents result from fires.

Science News Letter, March 6, 1954

AGRICULTURE

Bamboo Could Bring South \$2,000,000 Yearly

► **BAMBOO** COULD bring southern farmers an estimated \$1,300,000 to \$2,000,000 yearly if grown in quantity.

A study made by the Georgia Institute of Technology Engineering Experiment Station, Atlanta, shows that there are about 70 uses for bamboo in this country. At present, both finished bamboo articles and raw bamboo are being imported to meet the nation's needs.

The most important use for a native crop would be in paper-making, since large harvests of bamboo could supplement southern pine stands now being used in the manufacture of Kraft papers.

Bamboo also is suited for light, strong construction. It can make ladders, scaffolding and temporary trestlework. It could be used for concrete reinforcement, food, nails, phonograph needles and fuel. A market for bamboo furniture and household ornaments also exists in the United States, the survey revealed.

About 37 species of bamboo now can be obtained from nurseries. These species can

be grown successfully in all except the mountainous regions of Alabama, Florida, Georgia, Louisiana, Mississippi, South Carolina, Texas and eastern North Carolina and Virginia.

The Georgia Tech research was sponsored by the U. S. Department of Agriculture and was compiled into a report "A Survey of the Bamboos" by H. H. Sineath, P. M. Daugherty, R. N. Hutton and T. A. Wastler, all of the Engineering Experiment Station.

The report pointed out that there are between 500 and 1,000 species of bamboo in the world. Some of these species attain their mature height of 60 feet in six to eight weeks.

Science News Letter, March 6, 1954

SCIENCE NEWS LETTER

VOL. 65 MARCH 6, 1954 NO. 10

The Weekly Summary of Current Science, published every Saturday by SCIENCE SERVICE, Inc., 1719 N St., N. W., Washington 6, D. C., NOrth 7-2255. Edited by WATSON DAVIS.

Subscription rates: 1 yr., \$5.50; 2 yrs., \$10.00; 3 yrs., \$14.50; single copy, 15 cents, more than six months old, 25 cents. No charge for foreign postage.

Change of address: Three weeks notice is required. When ordering a change please state exactly how magazine is now addressed. Your new address should include postal zone number if you have one.

Copyright, 1954, by Science Service, Inc. Reproduction of any portion of SCIENCE NEWS LETTER is strictly prohibited. Newspapers, magazines and other publications are invited to avail themselves of the numerous syndicate services issued by Science Service. Science Service also publishes CHEMISTRY (monthly) and THINGS of Science (monthly).

Printed in U. S. A. Entered as second class matter at the post office at Washington, D. C., under the act of March 3, 1879. Acceptance for mailing at the special rate of postage provided for by Sec. 34.40, P. L. and R., 1948 Edition, paragraph (d) (act of February 28, 1925; 39 U. S. Code 283), authorized February 28, 1950. Established in mimeographed form March 18, 1922. Title registered as trademark, U. S. and Canadian Patent Offices. Indexed in Readers' Guide to Periodical Literature, Abridged Guide, and the Engineering Index.

Member Audit Bureau of Circulation. Advertising Representatives: Howland and Howland, Inc., 1 E. 54th St., New York 22, ELdorado 5-5666, and 360 N. Michigan Ave., Chicago 11, STate 2-4822.

SCIENCE SERVICE

The Institution for the Popularization of Science organized 1921 as a non-profit corporation.

Board of Trustees—Nominated by the American Association for the Advancement of Science: Ferdinand Payne, National Science Foundation; Karl Lark-Horowitz, Purdue University; Kirtley F. Mather, Harvard University. Nominated by the National Academy of Sciences: Harlow Shapley, Harvard College Observatory; Homer W. Smith, New York University. Nominated by the National Research Council: Leonard Carmichael, Smithsonian Institution; Ross G. Harrison, Yale University; Duane Rolter, American Association for the Advancement of Science. Nominated by the Journalistic Profession: A. H. Kirchhofer, Buffalo Evening News; Neil H. Swanson, Baltimore Sun Papers; O. W. Riegel, Lee Memorial Journalism Foundation. Nominated by the E. W. Scripps Estate: John T. O'Rourke, Washington Daily News; Charles E. Scripps, E. W. Scripps Trust; Edward J. Meeman, Memphis Press-Scimitar.

Officers—President: Harlow Shapley; Vice President and Chairman of Executive Committee: Leonard Carmichael; Treasurer: O. W. Riegel; Secretary: Watson Davis.

Staff—Director: Watson Davis. Writers: Jane Stafford, Marjorie Van de Water, Ann Ewing, Allen Long, Clare Cotton. Science Clubs of America: Joseph H. Kraus, Margaret E. Patterson. Photography: Fremont Davis. Sales and Advertising: Hallie Jenkins. Production: Priscilla Howe. Interlingua Division in New York: Alexander Gode, Hugh E. Blair, 80 E. 11th St., GRamercy 3-5410.