

Britain's new jet helicopter gave its first public demonstration recently, it is announced. Laterally directed jets directed sideways against the tail provide directional and torque control. The fan blades give it lift and forward motion as in American helicopters.

An English air official has just given

information relative to a new aerodynamic research station to be erected at Thurleigh at a cost of many millions of dollars, that will have the most modern equipment including supersonic wind tunnels. This is designed to help England keep to the front in aviation.

Science News Letter, August 31, 1946

PHYSIOLOGY

Easiest Way Is Best

Advice to housewives for efficiency in housework: maintain good posture, have shelves and work surfaces conveniently placed, and relax.

► THE EASIEST way to carry a heavy basket, climb stairs and sit in a chair is often the best way. Housewives, like efficiency engineers and factory workers, can study their motions in performing daily tasks so as to improve their methods, save energy and develop a good body carriage.

The feet should be apart when standing for your work so as to give a broad base and easy shift of weight. This will permit a wide range of movement, remind Dr. Helen Denniston and Margaret P. McCordic of the University of Wisconsin's College of Agriculture. Point the toes ahead to prevent strain on ankle and instep. Pull the abdomen up and hips down to hold the pelvis steady as a base for the spine. Lift the breastbone to allow heart and lungs plenty of room.

Supplies arranged in a circular manner around you are easier to reach. When they are beyond your reach, save time and energy by taking one long step instead of several shuffling ones.

Good posture going up stairs saves energy as well as being graceful. The body slants forward from the rear ankle. The entire forward foot is placed flat on the next step, and the body lifted by the large hip and leg muscles.

Keep the same erect posture when coming downstairs. While the toes, pointing straight forward, reach for the next step, the weight is received on the ball of the foot with an easy "giving" bend in the knee and ankle, Dr. Denniston and Miss McCordic point out.

When baskets or other objects to be carried have handles, the weight can rest against the hip. The weight, balanced by bending toward the other side, is then transferred directly to the large

bones and muscles of the legs.

All work surfaces should be a little below elbow level. Large blocks with a cavity in which the legs fit is good in elevating a table or bed to a suitable height for the worker. When the kitchen sink is too high for young helpers, have a broad platform handy for them to stand on while working.

Time and energy when ironing large pieces such as curtains or towels can be saved by fitting a wide board firmly over the ironing board. Because of the greater range of movement, it is more effective to stand than sit when ironing.

The position of the body when sitting down and getting up is fully as important as your posture while seated. With one foot back, the body weight can be shifted over the seat of the chair and lowered onto it by bending the knees. The trunk remains erect and arms relax into the lap. Reverse the movement when rising.

It is better to sit instead of stand when preparing vegetables or fruit. A low table or lap board, just above the lap, is excellent for this type of work.

When sweeping, place the hands far apart with one hand near the top of the broom handle. Bending from the hips and swinging the whole body from widely spaced feet makes sweeping a good exercise. By changing the position of your hands and direction in which you are sweeping, both sides of the body benefit.

There are three good positions for low work. A squatting position with one knee down and back straight is good when using a short-handled dust pan. The deepknee bend is fine for collecting many small objects spilled on the floor. When picking up a pencil or thread,

bend from the hips and keep the knees straight.

A chair should be lifted and carried with its back against the body, as most of the weight is at the back of the chair. Carrying a partially-filled pail or basket in each hand is easier than handling one full pail.

Learn to relax, Dr. Denniston and Miss McCordic advise in a pamphlet on how to make work easier around the house. Lie down on your back at full length on a bed or couch. A small rolled blanket placed under partly bent knees or your lower back may make you more comfortable.

Science News Letter, August 31, 1946

SCIENCE NEWS LETTER

Vol. 50 August 31, 1946 No. 9

The weekly summary of Current Science, published every Saturday by SCIENCE SERVICE, Inc., 1719 N St., N. W., Washington 6, D. C. North 2255. Edited by WATSON DAVIS.

Subscriptions—\$5.00 a year; two years, \$8.00; 15 cents a copy. Back numbers more than six months old, if still available, 25 cents.

Copyright, 1946, 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.

Entered as second class matter at the post office at Washington, D. C., under the Act of March 3, 1879. 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.

The New York Museum of Science and Industry has elected SCIENCE NEWS LETTER as its official publication to be received by its members.

Member Audit Bureau of Circulation. Advertising Representatives: Howland and Howland, Inc., 393 7th Ave., N.Y.C., PEnnsylvania 6-5566, and 360 N. Michigan Ave., Chicago, STate 4439.

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: Edwin G. Conklin, American Philosophical Society; Otis W. Caldwell, Boyce Thompson Institute for Plant Research; Willard L. Valentine, Editor of Science. **Nominated by the National Academy of Sciences:** Harlow Shapley, Harvard College Observatory; Warren H. Lewis, Wistar Institute; R. A. Millikan, California Institute of Technology. **Nominated by the National Research Council:** Hugh S. Taylor, Princeton University; Ross G. Harrison, Yale University; Alexander Wetmore, Secretary, Smithsonian Institution. **Nominated by the Journalistic Profession:** A. H. Kirchhofer, Buffalo Evening News; Neil H. Swanson, Executive Editor, Sun Papers; O. W. Riegel, Washington and Lee School of Journalism. **Nominated by the E. W. Scripps Estate:** Max B. Cook, Scripps Howard Newspapers; H. L. Smithton, Executive Agent of E. W. Scripps Trust; Frank R. Ford, Evansville Press.

Officers—President: Harlow Shapley. **Vice President and Chairman of Executive Committee:** Alexander Wetmore. **Treasurer:** Frank R. Ford. **Secretary:** Watson Davis.

Staff—Director: Watson Davis. **Writers:** Frank Thone, Jane Stafford, Marjorie Van de Water, A. C. Monahan, Martha G. Morrow, Ronald Ross. **Science Clubs of America:** Joseph H. Kraus, Margaret E. Patterson. **Photography:** Fremont Davis. **Sales and Advertising:** Hallie Jenkins. **Production:** Dorothy Reynolds.