MEDICINE

# "Soldier's Heart" Cured By Cutting Nerves to Gland

NERVE - CUTTING operation for "soldier's heart" which was successful in 119 out of 127 cases was announced by Brig. Gen. George Crile and Dr. E. P. McCullagh, of the Cleveland Clinic, at the meeting of the Association of Military Surgeons of the United States in Cleveland.

"Soldier's heart" was seen frequently in the military forces during the World War and often occurs in civil life as well. It gets its name from one of the symptoms, palpitation or rapid heart beat.

"It is not only the impact of battle that produces soldier's heart," Gen. Crile said, "the state of struggle, the atmosphere of competition, that surrounds and drives civilized man in his daily life may produce neurocirculatory asthenia (soldier's heart). The type of individual subject to this disease may be compared with finest type of machine such as a watch, whose delicate movement is most easily distracted."

In the operation, which he said is "dramatically successful," the surgeon cuts either the sympathetic nerves to the adrenal glands or the celiac ganglion in the sympathetic nervous system.

The operation produces its curative results, Gen. Crile believes, by breaking the circuit of the energy-controlling system which "is the only mechanism by which the emotions are expressed, by which fight and flight are executed."

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vascular (heart and artery) examinations. We are often chided about our rigid eye examinations that require pilots to be able 'to see around corners.' It is much more important that the pilot should live to see the next landing field. We must recognize that we are training men who must be able to stand the heavy pressure of flight duty. We cannot expect such endurance in the presence of cardiovascular disease."

The new three-way test of heart fitness advised by Dr. Bartlett and Dr. Carter involves the use of the familiar electrocardiograms and of two new technics, stethography and cardioscopy.

Electrocardiograms are records in the form of wavy lines on paper of the electric currents accompanying heart activity. With cardioscopy, the physician does not have to wait for a record on paper of heart activity but can look at the message from the heart as it is being sent. If he sees signs of heart damage, he can have a permanent record made of it.

With stethography, the heart "speaks for itself," giving a sound track record of its condition. Sound waves made by the heart as it beats are thus recorded so the physician can tell whether the heart tones are normal or whether there are murmurs indicating heart damage.

Synchronized electric and sound wave messages give much more information about the heart's condition than either one alone, Drs. Bartlett and Carter find. The sound record was essential for diagnosis of one-fifth of the cases reported, detecting early heart disease that would not have been discovered in otherwise thorough heart examinations.

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# New Three-Way Heart Test Urged for Military Pilots

CIVILIAN and military pilots and the young men about to train for defense service in America's expanding air forces should have the benefit of a new and highly efficient triple test for unsuspected heart disease, members of the Aero Medical Association were told at their meeting in Memphis.

Use of the new test detects 20% more cases of heart disease than would be found by the usual physical examination, Dr. Walter Merritt Bartlett, of Benton Harbor, Mich., and Dr. J. Bailey Carter, of Chicago, stated on the basis of their experience with the test in more than

500 patients and routine examinations of 200 civilian pilots.

Recent deaths of two young pilots, who suffered heart attacks in mid-flight and were barely able to land their planes before dying, emphasizes the need of more thorough examination of the pilot's heart, Dr. Carter pointed out. The ages of these two victims of unsuspected heart disease, 27 years and 34 years respectively, shows that serious heart damage is not see fixed to middle and old age.

confined to middle and old age.
"We, as examiners of pilots," Dr. Bartlett declared, "should place more emphasis on the thoroughness of our cardio-

### Faster Flights Foreseen

ASTER, more comfortable transoceanic flights over greater distances, made possible by the successful development of high altitude flying, would soon be under way if it were not for war. This war-conditioned forecast of the

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