

FLYING AMBULANCE

CARRIES SURGEON AND SUPPLIES FOR AVIATORS.

(Special to The Caduceus.)

Washington, Oct. 19.—In the regalia of an aviator, a young lieutenant climbs into his machine. The engine is started. It picks up speed and now. He gives the signal to let go—and the machine skips and hops along the turf. He wheels and circles and dives high over the flying fields. Ten minutes later several who have been following his flight utter low cries. Something has gone wrong—either with the airman or with his machine. The plane is toppling, tumbling—and then crash!

According to the experience of the Allies, a smash, such as this, in the majority of cases is caused by lack of physical fitness for the business of flying on the part of the aviator. Either that, or the airman was in no condition at the time to stand the strain of a trip.

It is here that the Air Service of the Army Medical Department enters into the calculations. It has a dual task, to increase the efficiency of our airmen and to reduce preventable accidents.

When the fierce hum of giant aircraft motors first attracted men in this war, there were none, or at least, few standards by which to determine whether an applicant would or would not make a safe pilot. The battleplane was a new engine of warfare, whose limits were undreamed and whose limitations could only be guessed. And the same held true for soldiers of the air.

There has been a long hard path of progress covered since then. Today medical officers, who became of special training and study have been assigned to the Air Service, decide with the aid of laboratory tests, first whether a man shall be accepted to be trained as a flyer, and second, after he has been trained at what altitudes and how frequently he shall work. In addition, they keep an unceasing vigil over the aviators not only during flights but also while they are on the ground. They direct their exercise, their play and their training and also stand guard over their food.

A carefully attuned, delicately adjusted mechanism is a war plane, but no less delicate is the adjustment of its pilot. The realization is saving lives and machines and increasing the power of the air forces of America and the Allies, a power which soon will be irresistible.

England and France, also Italy, after many bitter lessons began to exercise a ceaseless guardianship over their flyers. Their experiences and the knowledge gained has been placed unreservedly at our disposal. For this America today pays unstinted gratitude.

The chief of the Air Service of the American Army Medical Department, first studied the practice of weeding out and giving special care to airmen while with the British forces. With this as a base, the Medical Air Service began a period of experimentation and research regarding the

stress and strain of flying on human material, which still is progressing. It is one this accumulated knowledge that the supervision now is founded.

Flight Surgeon is the name now associated with the medical officers attached to a squadron or a training field. This does not necessarily imply that he himself is an aviator, although in not a few cases he has become one. The flying man, as is natural to suppose, places more confidence in an advisor who by experience knows the mental stress and the interplay of forces which occur while in the air.

It is one of the duties of a Flight Surgeon to keep in direct touch with his aviators while they are flying. With the Flight Commander he observes the man while aloft and on their return examines them to ascertain whether they shall be ordered to fly the next day or on what succeeding day. If there is any doubt, the policy prevailing is that an extra day's rest is far better than a dead or injured airman or student flyer. Next to the commander in view of importance and authority comes the Flight Surgeon at a flying field or airdrome.

A while ago Flight Surgeons were kept busy relieving a peculiar form of exhaustion brought on by flights at high altitudes. Oxygen was given. Today this form of exhaustion can be prevented, eliminating another dangerous factor. This is merely one example of the progress made, by rigid medical supervision of airmen.

In the study of the medical points of flying it was early seen that the type of work to be done, whether reconnaissance, pursuit flying, day or night bombing, had an important connection with the temperature and physical characteristics of the pilot, and that in attaining the greatest efficiency per man close study was necessary in placing the cadet in the kind of flying best suited to him.

To make these classifications under the most scientific methods, a central research laboratory has been established, also research laboratories at many flying fields. If a Flight Surgeon

observes something that causes him to doubt the fitness of a cadet for a class to which he has been assigned, he may refer him to the research laboratory for reclassification.

By standards now determined there are four classes of pilots; those who can withstand an altitude of 20,000 feet; those who can endure an altitude of from 15,000 to 20,000 feet; those whose range is from 8,000 to 15,000 feet; and those whose maximum altitude is 8,000 feet. These classes are by no means final. Men frequently are shifted from one to the other, not only for their own good, but for the good of the service—and final victory. Each class of flyers has its special work to do, and one is no less important than the other.

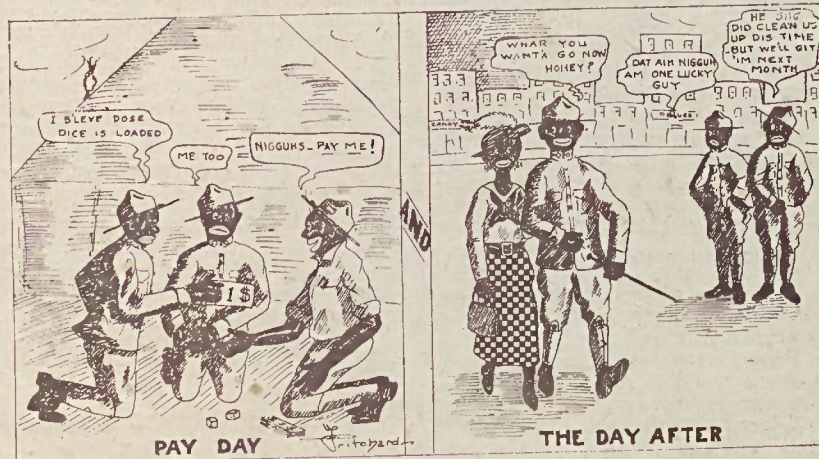
Today at most flying fields as a part of the Flight Surgeon's equipment is a flying ambulance. It carries a regulation army stretcher, placed in the fuselage, back of the observer's seat, lengthwise. When necessary not only does it transport the Flight Surgeon to the injured pilot in the shortest possible time, but when the latter's condition will permit it transports him back to hospital and operating room with the same speed.

The policy of protecting the aviator and promoting the efficiency of our air force won converts almost overnight. In a remarkably short space of time, the Flight Surgeon has won a definite place for himself with the air squadrons, and the Air Service of the Army Medical Department a niche of importance in the humming War Department offices of this nation's capitol.

SIX FROM FURLOUGH.

Those reporting back from furlough to duty during the past week are Sergeant Robert Martin from Ansonia, Conn.; Corporal Bill Hoyle from Massachusetts; Private First Class Gilbert Bentley from Fall River, Mass.; and Walter Sullivan from the same city; Private First Class Ray Gannon from New Hampshire and Private Raymond Myers from Pennsylvania.

A MATTER OF LUCK



The above cartoon was drawn by Thomas Pritchard, 409 North Pine street, who is employed in mechanical drawing. He has been active in furnishing a number of striking posters for the Fourth Liberty Loan drive and his "Buy A Clear Conscience" cartoon in The Caduceus of two weeks ago has been the subject of much comment.