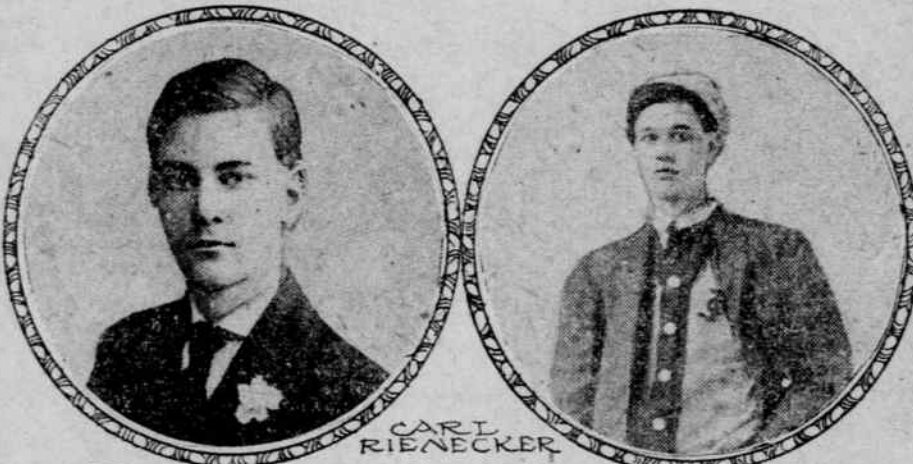


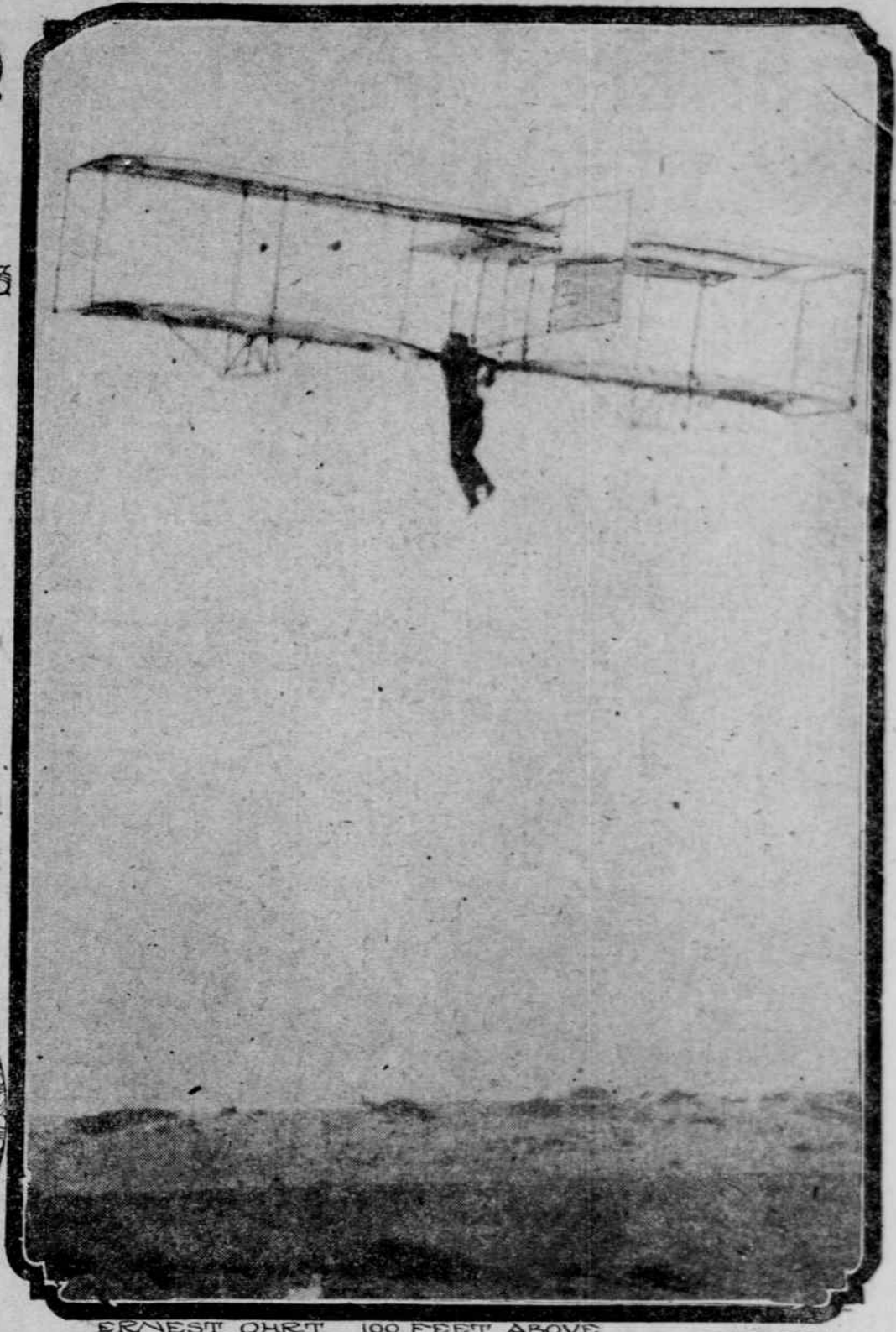
San Francisco BOYS WHO FLY

THE TWO DOZEN 16-YEAR-OLD LADS OF THIS CLUB BUILD GLIDERS AT A COST OF \$14 EACH AND SOAR IN THEM ABOVE THE PARKSIDE DUNES--AND NOW COME MOTORS! : : : : :

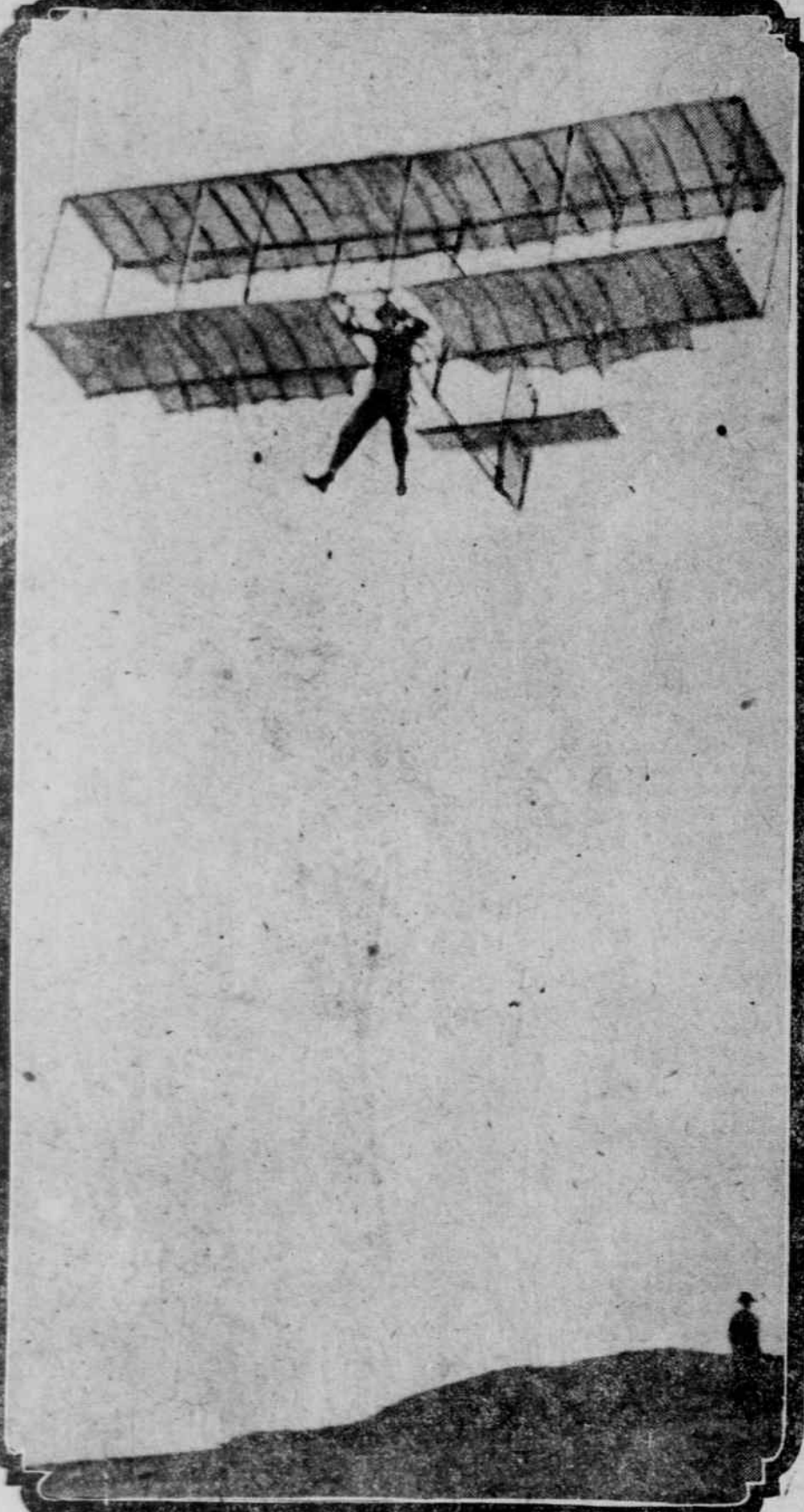


CARL RIENECKER

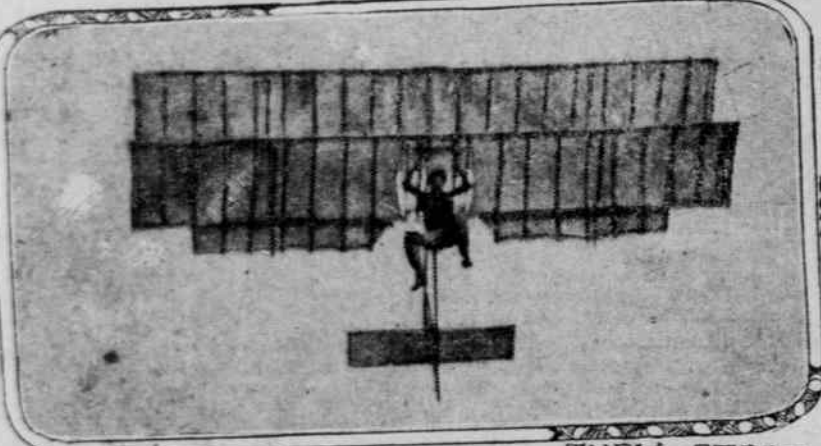
LELAND S. WALLACE



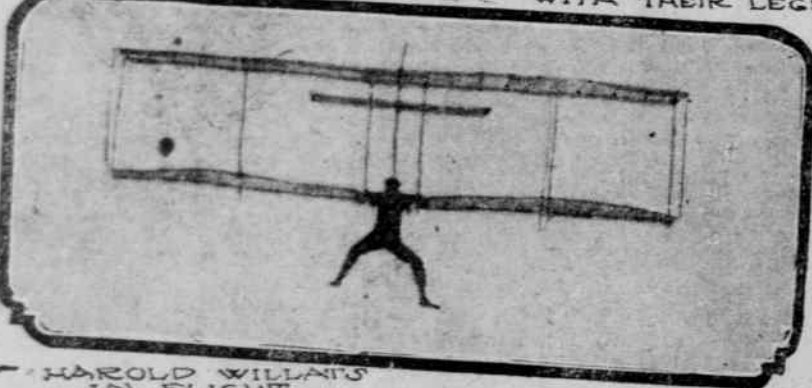
ERNEST OHRT 100 FEET ABOVE THE GROUND.



ROB BERGFELD MAKING A LONG FLIGHT.



THEY STEER WITH THEIR LEGS



HAROLD WILLIAMS IN FLIGHT.

By Mabel H. Collyer

SAN FRANCISCO has the distinction of possessing a club of the youngest practical aeronauts in the world.

The San Francisco aero club is called, composed entirely of boys whose ages range from 14 to 17 years. The club has been in existence barely four months, and during that time the boys have built three separate gliders and have made more than a hundred successful flights.

The boys have been very quiet about it.

"You see, we've just been practicing," they explained. "Come out on the sand dunes after the first of April and you will find us flying around with real engines in our machines. Then you will see some sport."

They are school boys and working boys, so they make their flights only on Sunday afternoons. The sand dunes are south of the park. Take the Ellis street car, transfer at Twentieth avenue, drop off at N street, and then look up. You will see their big white gliders skidding along against the wind.

I wanted to find out whether this club of youthful high fliers was affiliated with any more mature organization. A tall blonde boy shook his head.

"No, we are just going it alone. The trouble with men's clubs is they do too much flying on paper. They draw diagrams and give lectures that people can't always understand. We wanted to start flying right away, so we just built our own machines and went ahead. Flying is what talks. You get up in the air and wave at a fellow and then he understands. That's what."

Hats off to the impatience of youth! The boys want to begin where their elders left off, but youthful impatience has ever been a fine factor in the world's advancement. Sweet sixteen always proclaims that life is short. "Hurry up," is youth's slogan. Staid

40 realizes that there is some time to spare, after all. These boys, with the benefit of all aeronautical investigation since the time of Icarus, are already tiring of Lillenthal's supreme invention, the gliding machine. It is the old story of Columbus and the egg. Lillenthal showed the world how to do it, and it proved a simple thing, after all. Every great invention, it seems, makes use of a simple discovery that some man stumbled on, while the rest of the unobserving world blindly passed it by. And many of our greatest inventors have started working out some unsolved world's problems when mere boys. A voice at my elbow assured me of this.

"Say, Lillenthal was only 14 years old when he began his work on airships. He got his tip from a bird; and Wright and Blériot and all those other fellows got their tips from him. The Wrights were just kids when they started out, and they had a hard time getting anybody to believe in them, after they had the thing all worked out. They went Lillenthal one better, and then some. But Lillenthal got killed; so he didn't have a fair show."

But through Lillenthal's efforts it has come to pass that in this generation any boy with a knowledge of carpentering, a saw and a hammer can construct a glider that will almost put him on a par with the birds in short order—at a cost of \$14. These gliders, of course, are not equipped with engines. The boys make free flights, jumping from steep hills or cliffs in the manner in which Lillenthal made his first experiment, or towed flights, when other boys run with long ropes attached to the glider, which they promptly swing up into the air, rising to 100 feet or more, and covering a distance of from 200 to 450 feet. The boys thus far have not exerted their best efforts toward breaking each other's records. Ernest Ohrt held the record for height last week, having soared 110 feet. Guy Jones made a record for distance of 450 feet. Harold Willats holds the record for passenger-carrying, having made a flight in the rain, with Ernest Ohrt and Guy Jones swinging on the bars with him. Ernest Ohrt, the president of the club, aged 16, and his brother Hans, a year and a half younger, constructed the first glider, called "The Ohrt Bros. No. 1." These two boys with two others, Rob Bergfeld and Harry Willats, are the founders of the club. Among the other members are Al Sie-

mer, Carl Rienecker, Guy Jones, Waldo Brown, Dudley Brown, Lloyd Meussdorffer, E. Lindsey, Howard Winthrop, W. F. Brown, Leland S. Wallace and Tom de Nike.

Ernest Ohrt has written a brief description of his machine, giving measurements, etc. The two brothers are now busily engaged building a second machine that is to eclipse the first one in every way.

"The glider constructed by my brother Hans and myself is a biplane of our own design, measuring 20 feet from tip to tip. The depth is 4½ feet, including 1 foot extension of the ribs. The height is also 4½ feet, and the machine has 175 square feet of surface. The ribs which form the planes are 1 foot apart, and are covered with muslin, which has a double coating of starch. The glider has a rear rudder which extends 8 feet, and a small horizontal plane. There are two armsticks in the center of the lower plane, on which a trapeze hangs, and the glider sits on this, or swings from his arms. We balance the machine by throwing our bodies to one side or the other. Some of the boys kick their feet about like acrobats, and others just use their shoulders. In descending we lean forward. In starting we lean back—away back—when we want to go very high. The towed flights are more successful than the free flights. We are building our second machine on a much broader plan; so that it can be run with a motor. Our present machine cost about \$14."

The Ohrt brothers made their first successful flight in the glider November 25 last. Harold Willats' machine, which is somewhat larger and stronger, and therefore has a passenger-carrying capacity, was completed about two months ago. Rob Bergfeld, owner of the third glider, is about to sell out to Howard Winthrop. The boys all aim to be original in their designs, and Bergfeld is busily engaged building what he calls his "Dragon Fly," a

machine with a flapping wing device. "We have been using these gliders merely for experimental purposes," explained Leland Wallace, who is one of the older boys, a student at the Polytechnic high school. "We all want to get monoplanes or biplanes that will run with motors. The gliders are just the first step. We have not smashed any records so far, but we all hope to later on."

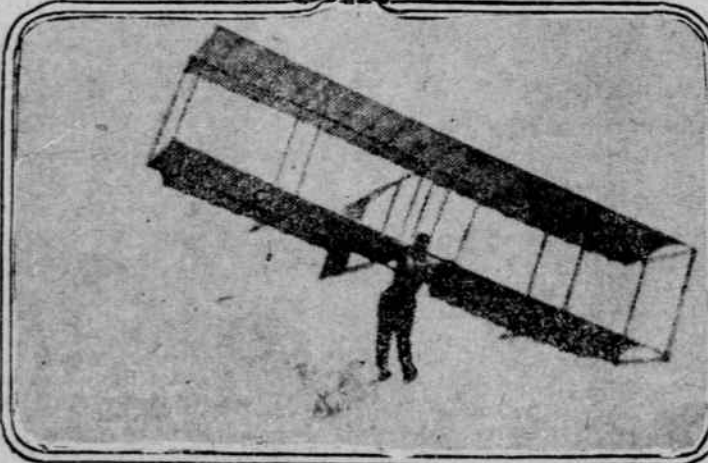
The boys all have their pet ambitions in regard to what they would like to do when they get their big machines completed. Wallace thinks that he would like to fly over San Francisco; the Ohrts would like to make a trip across the bay; Meussdorffer wants to make a good square landing on the top of Mount Tamalpais; Hotchner wants to be an expert model maker and would like to build the smallest machine extant; Willats wants to be a speed bug—he would like to soar just a little bit higher than any of the other fellows.

The boys generally do team work in building the larger aeroplanes. Jones and Lindsey hope to have their biplanes ready in a couple of weeks. Wallace and Rienecker, assisted by Meussdorffer, are constructing a monoplane upon a secret design, which they hope to have ready for inspection in about three weeks. The boys have made arrangements to rent an engine of French manufacture, and it is with this that the club will make its initial flight with real power.

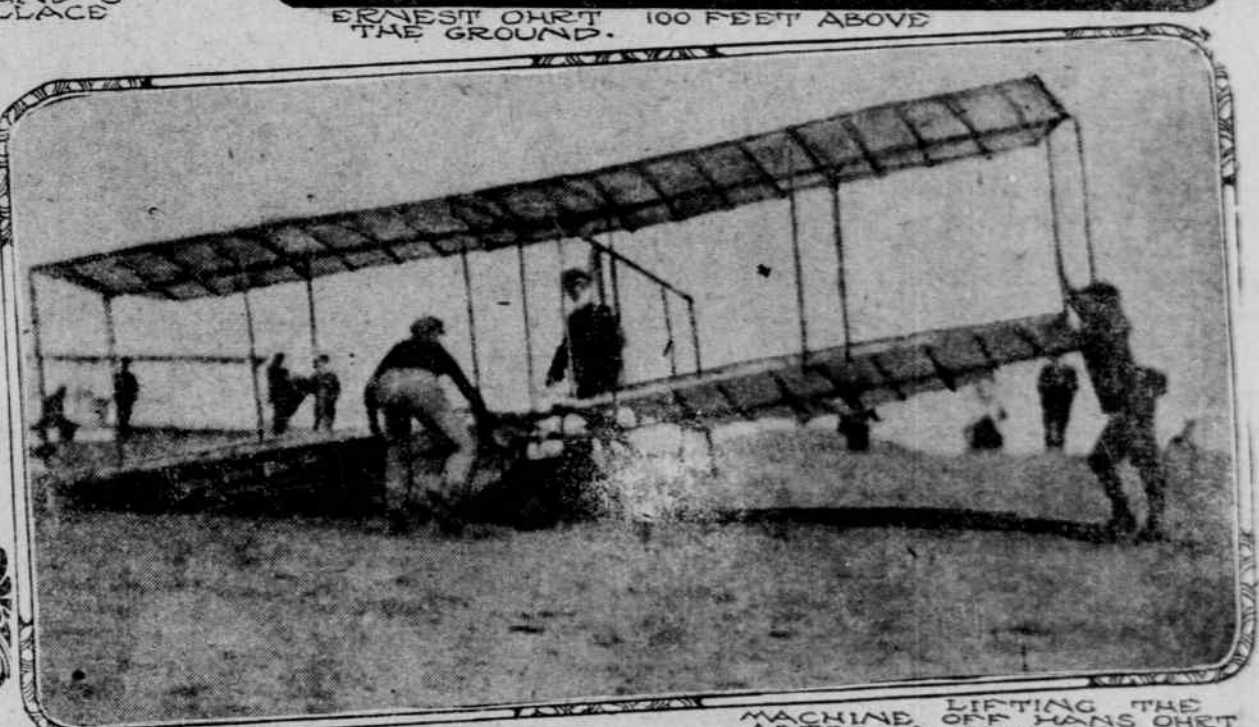
"We don't like to boast of the things we are going to do until we can make a few demonstrations," said Wallace modestly. He is something of a draftsman, and the walls of his room are covered with working drawings of aeroplanes. He has a scrapbook full of pictures of all the famous airships invented so far, and can give a detailed description of each. He hopes



THE OHRT BROTHERS AVIATORS.



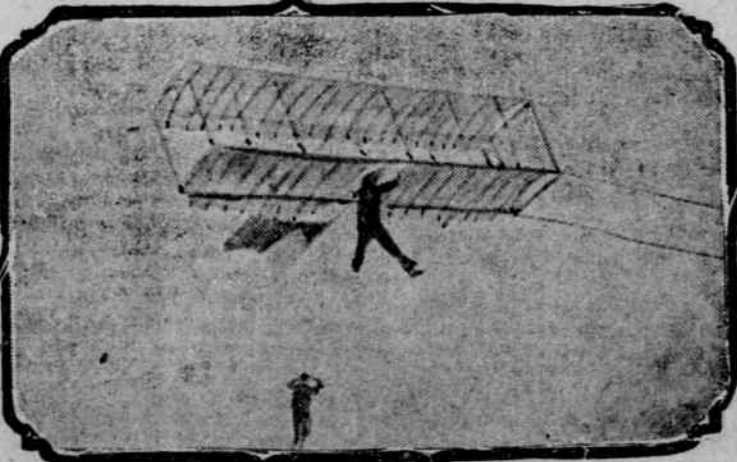
WALLACE FLYING.



LIFTING THE MACHINE OFF HANS OHRT AFTER A TUMBLE.



MEMBERS OF THE SAN FRANCISCO AERO CLUB.



HANS OHRT BEING TOWED ALONG.

to be a professional aeronaut himself, if not an inventor.

"A fellow has an awful lot to work with in the 'inventing line,'" he said enthusiastically. "Just look at what has been invented in the last few years. The airship is all right. They are looking for safety devices now and new designs. Did you know that Curtiss was just a newsboy and Paulhan was a tight rope walker? Nearly all of the inventors were poor. I guess that is a good sign."

Forwarding this good work, the Pacific Aero club is offering a series of prizes for original models of airships, and most of the members of the San Francisco Aero club hope to have exhibits in this contest, which will be closed some time in May. Many of the models that the boys intend to enter are already constructed. Professor Hildaigo is offering a prize especially for school boys and girls.

"I wonder if a girl could make a model of an airship," said Meussdorffer musingly. "Girls are brave enough to go up in the machines all right, but they don't cut much of a dash with tools. We were thinking of letting a girl go up on one of our gliders, but we got afraid that she might let go or something up in midair."

"And what would happen if she let go?" I asked. "I wouldn't like to tell you," he said. "I guess there wouldn't be much to tell, anyway. She'd just be dead. But we have not had any accidents to speak of. We've smashed a machine once or twice, but the boy got off every time with just a few scratches. Of course, a fall before the machine got very high would not hurt a fellow very much, especially out there in the sand. I was just thinking what might happen if a fellow let go a hundred feet up in the air. No boy ever has let go; so we really can't tell exactly."

So gliding may be rated as a comparatively safe sport, because the boys simply do not let go. Sometimes they land under difficulty when

a rope gets entangled in somebody's feet, or the wind gets frisky.

"But the wind is our friend," said Willats. "We can't go up without it. Free flights are the only kind we can make in a dead calm, and free flights are not nearly so exciting as towed flights. In a towed flight, when the wind is good and strong the machine goes right up like a bird. When the wind is not very strong a fellow has to run a little with the glider before it leaves the ground."

Willats, who is a slender, wiry little fellow, makes very successful flights, attaining a good height with very little effort, and cutting through the air with a clean, graceful sweep. The heavier boys have more trouble in making a start. Lightness seems to count for a good deal, as in the case of a jockey. The younger Ohrt boy, Hans, is a little fellow, who has no trouble in leaving the ground swiftly.

Spectators are welcome at their exhibitions from now on, say the boys, and with the wind good trim, and the machines in good order, they never disappoint.

"But what we are doing now isn't anything to what we are going to do," I was reminded as a parting shot. "The boys have their machines stored in a big barn in Twentieth avenue; but the building will be far too small to accommodate the new machines; so they are making arrangements to move into larger quarters."

The club is open to new members. All you need to get in is grit and a determination to "go up in the air." There is no initiation fee. The dues are 50 cents a month. Nor is youth an imperative requirement.

"We wouldn't mind a bit if some grown up men came into the club," said one of the boys. "We have not joined the international association yet; but we hope to later on. And the international association might look a good deal farther before finding more likely material than is contained in this club of daring young experimenters."