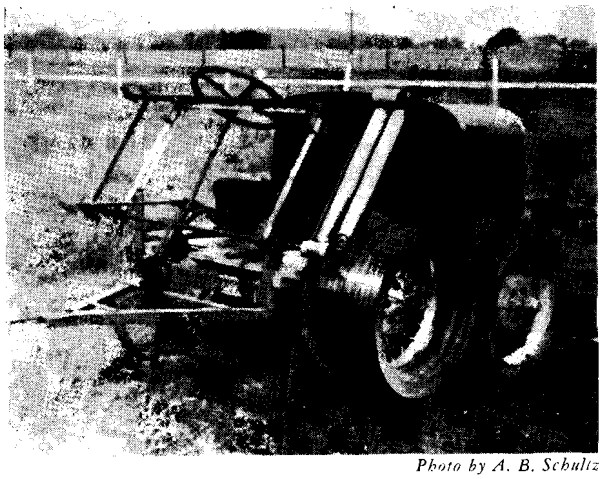

Photo by A. B. Schultz

The Meeker winch

units: first, the winch and crew, and second, the retrieving car and crew for rope and glider. In auto training, one unit is sufficient for the whole job.

I made one experiment with three students in complete winch training and did not have any accidents. It is necessary to have a very well trained winch operator, with flying experience, who can follow the student and act to the instructor's signal. The instructor is stationed at the halfway mark between take-off point and winch. It is more comfortable to give a student his information from this point than from a fast moving tow car. The value in winch training increases when a student is so far advanced that he can fly back in the direction of his starting point. By doing so, the rope retriever can bring back the ship and rope at the same time. From that point on it should be possible, with a willing crew, to make as many winch launchings as possibly could be made with the auto tow methods.

One important factor in glider flying is the upkeep of the launching equipment. We all know that the life of a tow car is very short. Our fields are usually so short that the driver does not have enough time to shift in high gear, a speed of at least 35 miles per hour in second being necessary. The runways on fields where we can afford to fly are not of the best grades. Here the winch has the advantage. Our tests showed that, since we climb 1,500 feet a minute, we can say an average launching will take 35 to 40 seconds and in this time, the motor has to work only about 20 seconds under full power, because with an increasing rope angle to the ground, the drum speed is steadily reduced. That would give us only about a half an hour running time for the winch motor for fifty launchings. A winch that is fairly sound mechanically should last a glider group indefinitely. The Aero Club Albatross had a winch built for about $15.00 and it is still in use after seven years.

At this time, I would like to insist that a winch should be portable and small, possibly as a two-wheel trailer, so that it could be hooked to any standard trailer towing device. A winch should have a self-reeling mechanism. It should absolutely have a guillotine for rope cutting, especially if it is used for primary training.

In the last few months, many have made experiments with wire in place of rope. I would like to say a few words of warning regarding this practice. Personally, I have had no experience with wire but I was cautioned very strongly by a well known instructor from Germany against using it. It has been the cause of several serious accidents in that country. When the European pilots came to us two years ago, they were a little skeptical about winch launchings, having had some bad experiences on the other side. Winches in Germany operate with a wire or steel cable and are very rigid and stiff in towing. The pilots were amazed when they were towed up in Elmira for the first time. The tow was surprisingly smooth, because we use rope. Rope absorbs the gust loads much better than wire and gives a much softer tow. Rope can be cut much more reliably in emergencies. Another advantage is that rope drops smoothly, so that there is no need for a parachute, as in the case of wire, which has the tendency to curl when released from the ship. We would rather sacrifice height and fly safely.

Triangle Gliderport

(Continued from Page 3)

It has long been the dream of the Detroit Glider Council, and particularly of some of the component groups which make up the Council, to have a large, well-equipped field with every up-to-date method and all the facilities known for soaring in use. Our plans for the not too distant future sound something like this: To find a parcel of land which is of little use agriculturally to its owner and which he will be willing to rent to us for one to three dollars per acre and on which he will grant us a five or ten-year lease. This must necessarily be located within reasonable driving distance of Detroit, let us say within a thirty-mile radius. It must be well-drained and spacious enough to permit a towing run of three-quarters to a mile in length. If our scouts find such a location, it will probably be covered with fences, hedges, small trees, and maybe even a ditch or two. We would have to obtain permission to clear the land to the best of our ability. An east and west strip of narrow width or an L-shaped field of sufficient length would serve our purpose and at the same time take up the smallest number of acres possible. We would plan to build our own hangars of inexpensive used metal sheeting, or in the case of a long-term lease, solicit WPA aid in building them. Local leaders feel that such a move would be advisable if it permitted tows to greater altitude to be made, and they feel that it could be financed for the amount of our present annual income. The extra benefit obtainable from high altitude tows would be more than enough to warrant such an undertaking.

Another idea which has been propounded hereabouts, and which has met a favorable reception, is to supplement Triangle Gliderport with a towing strip or a suitable field nearby where higher altitudes could be attained on the tows, this location to be used only for the advanced flying activities. Triangle would still be the major student training center and would house the ships. Perhaps we can accomplish this this summer. At least we hope to keep progressing toward our goal of a real gliding and soaring center and, meanwhile, we shall continue to try to make our season a very successful one at Triangle Gliderport.