



Compact Auto Kitchenette Convenient for Tourists

FOR the automobile tourist, one of the new conveniences is an ingenious auto kitchenette invented by Miss Lou Shields Gilmore, of Los Angeles. It consists of a cabinet attached to the running board, containing a refrigerator, compartments for food and dishes and a water tank.

The entire outfit weighs only 55 pounds and can carry ice enough for two days and sufficient food to supply a party of five or so for a longer period. With the addition of a small oil stove, the camping or touring party's equipment is complete.

"Machine Gun" Duplicator Saves Typist's Time



TO PREVENT waste effort and duplication of work in the writing of business forms—invoices, orders, requisitions, bills of lading and similar records ordinarily requiring many carbon copies—a rapid fire duplicating machine has been perfected by a nationally known manufacturer.

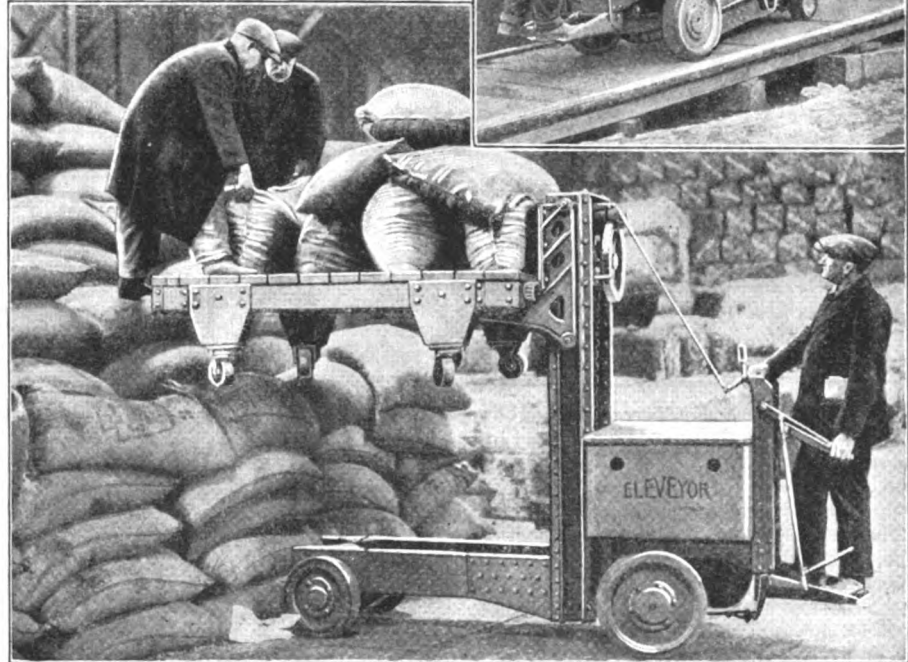
Instead of making many changes of carbon sheets and cut forms, with this machine the operator may load up once and continue uninterrupted until the work is completed.

The manufacturer compares the operation of this device with that of a machine gun. The machine has a "magazine" of 1000 sets of form and 750 feet of carbon paper. It permits the typist to use in actual writing the time ordinarily lost in preparing to write.

THE EIFFEL Tower will last for 23 years more, according to engineers who recently examined its stability as the result of a report that it was falling down.

Portable Factory Elevator Lifts Loaded Skids

A NEW time and labor saver for factories where heavy material is carried from place to place is an elevating truck that can lift entire rolling platforms and their loads to a height of five feet. The platforms are lifted by an elevating shelf running on a truck framework and driven by an electric motor.



The upper photograph shows a skid, fully loaded, picked up by the elevator truck. Below, the skid and its load elevated for discharging

Speedy Fighting Plane Has Novel Wing Design

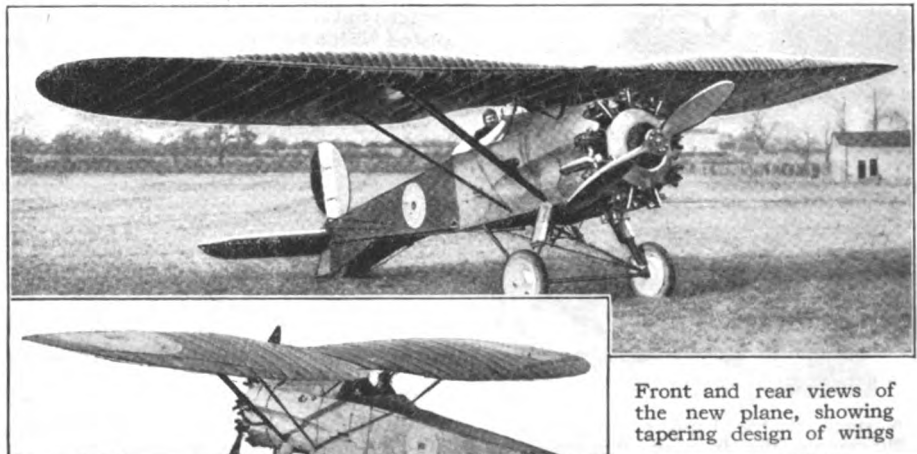
A NEW high-speed airplane of the fighting type, which is expected to beat all records in aeroplane performance, has been completed for the British Air Ministry. Its outstanding feature is the unusual wing shape, thin at the center, thickening towards the inner third of the span, and tapering finally off to a fine line at the outside. It is operated by an air-cooled motor.

The new machine embodies the advantages of the cantilever and braced types of wings without their disadvantages. The bracing has been reduced to a minimum, for only two small steel struts are fitted at each side. Where the struts are joined to the wing, the section of the wing is thickest, since the greatest stresses occur here. Where the stress is less, the thickness of the wing has been reduced; for the thinner the wing, the greater its efficiency. Both fins and rudders are cantilever surfaces.

An air-cooled engine developing 400 horsepower is used in the new machine. In recent official tests, the engine broke all endurance records for air-cooled engines, running for 150 hours, including a non-stop run of 50 hours. Fitted to a modern fast scout, this is equivalent to three trips across the Atlantic.

After the test, the engine was dismantled, and the maximum wear on any part was found to be less than one-two thousandth of an inch, proving that aircooled engines, even of very great power, can safely be fitted to airplanes serving long distance routes.

As an aircooled engine is much lighter than a water-cooled one, and does away with radiators, water piping and tanks, a great saving in weight can be effected, it is claimed. Doubtlessly airplanes of the future will be propelled by aircooled engines.



Front and rear views of the new plane, showing tapering design of wings