

Piasecki Aircraft Corporation

FLYING PLATFORM—The aerial jeep built by Piasecki Aircraft Corporation flies without wings or conventional propellers. It can travel equally well on the ground with or without roads.

INVENTION

# Current U. S. Patents

➤ AN AIRBORNE platform that can run on the ground or fly troops or supplies over rough terrain earned a U.S. patent for one of the world's top helicopter authorities.

Frank N. Piasecki, head of Piasecki Aircraft Corporation, Philadelphia, Pa., and helicopter-building pioneer, was awarded patent 3,184,183 for his flying platform, built under contract with the U.S. Army. Nicknamed the "Aerial Jeep" by the Army, the vehicle actually looks like a raft with a ducted fan in front and one in back of the pilot. The fans, which are set into the platform itself, turn like helicopter blades letting it go straight up into the air.

This vehicle is not limited to low altitudes, but can fly at any reasonable altitude just as any other fixed wing or rotary aircraft does, reports Mr. Piasecki. In addition, by virture of its powered wheels it can be driven along the ground wherever the terrain is suitable.

Two prototypes of the platform have already been built and flight tested. The latest to be built is capable of seating five persons. It is 24.5 feet long, 9.2 feet wide and 5.9 feet high.

#### Tree Shaker

A newly patented tree shaker that grabs hold of a branch or limb with its metal arm can be towed up and down the paths of an orchard, rattling the ripened fruit to the ground.

The arm, which grips the tree limb by means of two clamping plates, is attached to a special trailer unit that cushions and controls the shaking action so that the tree is not rattled out of its roots. A hydraulic motor is used to make the gripping arm vibrate. The entire apparatus can be hauled around by a standard farm tractor.

The arm can be adjusted to make it shorter or longer, reported inventor Robert M. Shipley Jr., Cloverdale, Calif. In addition, the length and strength of the vibrations can also be adjusted.

Mr. Shipley earned patent 3,183,656 for his invention.

## Ship 'Patch'

A giant "patch" riding on a rail along the side of a ship can be quickly draped over the side like a windowshade to cover up a hole caused by a collision or accident.

The patch, which can be made of heavy canvas or flexible plastic, is stored in a rolled-up form at one end of the track until it is needed.

The temporary patch earned patent 3,-183,876 for Semen M. Kronhaus, Los Angeles, Calif.

### **Credit Card Checker**

A newly patented number-reading machine checks a credit card, then either mutilates it or keeps it if it finds out a person is trying to cheat.

Thousands of persons either become bad credit risks, lose their cards or maybe even have them stolen, report Herbert L. Brown Jr. and John D. Helms, Dallas, Texas. With this invention the numbers of all invalid cards are kept in a memory system in the machine. The card is fed into the machine, which reads the number and makes sure that the number is not on the list. If it is, the machine will either deface the card or keep it.

The machine earned patent 3,184,714 and patent rights were assigned to Texas Instruments, Inc., Dallas.

• Science News Letter, 87:363 June 5, 1965

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