Support with Basin Keeps Christmas Tree Fresh

THIS Christmas-tree support fits any tree, preserves it from withering, and restricts its tendency to shed needles. It will hold a tree weighing 250 pounds, it is claimed.

The four legs of the device, spreading enough to allow a container of water to stand between them, raise the tree several

inches from the floor. Thus, although the base of the tree extends into the water, it does not rest on the dish. This supply of water keeps the tree fresh.

A wingnut adjusts the holder to the size of the tree butt, and holds the tree securely. Screw holes in the legs permit fastening them to the tree.

When not in use, the holder folds into a small, compact shape.



High-Pressure Air Rifle for Marksmen

ANY marksman can practise with a new high-pressure air rifle recently put on the market. It has the full range and penetration of a high-powered firearm. The rifle is 22 caliber and will kill all sorts of small game at 100 feet.

A plunger rod with a button that protrudes from the end of the gun, works back and forth in the gun barrel. Air is compressed in a chamber by placing the muzzle of the gun on the floor, holding the plunger rod button firmly between the soles of one's shoes, lifting the gun until the rod is out full length, and then bearing directly down. The number of strokes pumped in the gun determines the force of the shot.

Inexpensive pellets are used as ammunition. There is nothing in the gun to wear out and the only care necessary is an occasional oiling.



E. S. Wilson, government chemist, with 38 samples of bootleg liquor under test

Peril in Bootleg Poison Revealed

TEN to one odds against the man who patronizes the bootlegger were revealed recently when 38 samples of illicitly sold liquor, bought in 15 cities, were analyzed by Government chemists at Washington, D. C.

Only two of the 38 proved to be whisky of pre-prohibition grade. One was purchased in Boston and one in Washington, D. C. Two were passable synthetic gin, from Cleveland and Los Angeles. The remaining 34 samples were poisonous.

Portable Welding Outfit Carried like Knapsack

AN OXYHYDROGEN burning and welding apparatus that can be carried on the back of a workman like a knapsack has been invented in Germany. Heretofore it has been necessary to use two heavy steel tanks and long hose to convey the gases to places difficult of access. Sometimes the hose has been cut in confined spaces with serious results to the workmen.

The new outfit consists of two small steel tanks, one containing liquid oxygea; the other, liquid hydrogen. Pressure of the gases is controlled by valves. A third control regulates the mixture of the two gases for the flame.



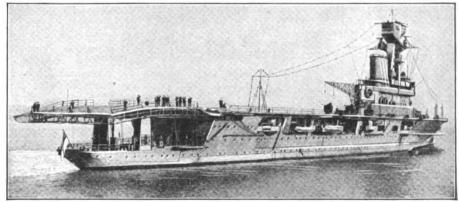
England Has Speedy Plane Carrier

THE first vessel in the world especially designed as a floating landing field and airplane carrier, the *Hermes*, was put through protracted and comprehensive tests by the British Admiralty. The carrier is capable of a speed of 25 knots.

In the body of the *Hermes* are two hangars with room for 20 planes.

The funnel, observation tower, wireless apparatus, and operating quarters all are placed far up in the bow, allowing for a spacious flying deck extending more than three fourths the length of the vessel.

Planes are elevated from their hangars to the flying deck by electric lifts and cranes.



The new airplane carrier Hermes, showing spacious landing field behind funnel