

• New Machines and Gadgets •

If you want more information on the new things described here, send a three-cent stamp to SCIENCE NEWS LETTER, 1719 N St., N. W., Washington, D. C., and ask for Gadget Bulletin 122.

⚙️ **DEFINITE SMALL VOLUMES** of liquids, for clinics and laboratories, can be dispensed quickly and accurately with an automatic pipette recently introduced. The instrument can be set to deliver any volume of 1/10 to 5 cubic centimeters, and once set delivers always the same volume with each stroke of the piston, thus saving time and mistakes in such work.

Science News Letter, September 19, 1942

⚙️ **A POCKET UMBRELLA** which not only has a telescoping handle—in five parts—but ribs that fold zigzag in three parts is described in a recent patent. When closed, staff, ribs, cloth and all slip into the cylindrical handle which is finally closed by a cap on top of the umbrella. No water from this umbrella drips on your neighbor's toes when it is closed.

Science News Letter, September 19, 1942

⚙️ **THE OLD APPLE TREE** "ain't what she used to be." Instead of men on ladders picking the fruit, a device, which has recently been patented, neatly cuts the stem just behind the fruit and conveys the latter down the pipe to the crate in which it is to be packed. The pipe contains flexible baffles which permit the fruit to descend gently and also wipe it in case it should be wet. The inventor provides different sorts of picking heads for different shapes and sizes of fruits.

Science News Letter, September 19, 1942

⚙️ **GLASS SPRINGS**, although not as strong as steel springs, have certain advantages. The most remarkable of these is the apparent absence of "fatigue," which causes a metal spring to break after a great many bendings at much below its usual breaking strength. Its resistance to chemical action is another advantage. A glass spring, used in an atmosphere laden with sulfuric acid mist, underwent 8,000,000 deflections without any sign of giving out. It may seem strange that material as stiff as glass can be used as a spring, but in thin strips it is quite springy.

Science News Letter, September 19, 1942



⚙️ **A NEW BLACKOUT** street light is what the girl in the picture is looking at—in case you hadn't noticed it. This lamp, approved by the War Department, gives an illumination equal to 1/60 that of the full moon, sufficient to distinguish a pedestrian 40 feet ahead. The

lamp is made mostly of cast iron, to shed shrapnel, and plastics. The light is furnished by a 9-watt bulb. In England, the maximum outside illumination allowed without special permit is "starlight," the intensity of which is 0.0002 foot-candles and about half as bright as the illumination of this lamp.

Science News Letter, September 19, 1942

• Glances at New Books •

➤ A **GEOGRAPHY** book in the conventional flat shape, **NEW WORLD HORIZONS**, edited by Chester H. Lawrence (*Duell, Sloan and Pearce*, \$2.75); that is all that is conventional about it, or flat, either. It looks at geography from the airplane point of view, rather than from that of the railroad train and steamship. A student (whether child or grownup) who even skims through this book comes out with an insight into geography as a decidedly kinetic science.

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Books Just Off the Press

- ASTRONOMY, MAPS AND WEATHER**—C. C. Wylie—*Harper*, 449 p., illus., \$3.
- ATTACK, A STUDY OF BLITZKRIEG TACTICS**—F. O. Miksche—*Random House*, 267 p., \$2.50.
- CIVILIAN HEALTH IN WARTIME**—Francis R. Dieuaide—*Harvard Univ. Press*, 328 p., \$2.50.
- THE CLARKS: AN AMERICAN PHENOMENON**—William D. Mangam—*Silver Bow Press*, 257 p., illus., \$2.50.
- COMPENDIUM AND DESCRIPTION OF THE WEST INDIES**—Antonio Vazquez de Espinosa, Charles Upson Clark (translator)—*Smithsonian Institution*, 862 p., \$2.50.
- Fossil VERTEBRATES FROM THE SUPERJACENT DEPOSITS NEAR KNIGHTS FERRY, CALIFORNIA**—R. A. Stirton and H. F. Goeriz—*Univ. of Calif. Press*, 25 p., 35c.
- A LABORATORY MANUAL OF EXPERIMENTS IN PHYSICS** (Fifth ed.)—Leonard Rose Ingersoll and Miles Jay Martin—*McGraw-Hill*, 342 p., tables, dia., \$2.50.
- THE MORSE CODE: LEARNING AND PRACTICE**—R. G. Shackel—*Longmans*, 64 p., 40c.
- NATURAL AND SYNTHETIC HIGH POLYMERS** (Vol. IV)—Kurt H. Meyer—*Interscience Publishers, Inc.*, 690 p., illus., \$11.
- THE NUTRITION HANDBOOK**—Demetria Taylor—*Doubleday*, 231 p., \$2.
- OCEANOGRAPHIC OBSERVATIONS ON THE "E. W. SCRIPPS" CRUISES OF 1938** (Vol. 1, No. 1)—H. U. Sverdrup—*Univ. of Calif. Press*, 63 p., dia., 75c.
- PLIOCENE VERTEBRATES FROM BIG SPRING CANYON SOUTH DAKOTA**—Joseph Tracy Gregory—*Univ. of Calif. Press*, 138 p., illus., \$2.
- PSYCHOLOGY IN NURSING PRACTICE**—Philip Lawrence Harriman, Lela L. Greenwood and Charles E. Skinner—*Macmillan*, 483 p., illus., \$3.25.
- THE PSYCHOLOGY OF HUMAN LEARNING**—John A. McGeoch—*Longmans*, 633 p., \$4.
- REVIEW OF RECENT LITERATURE ON VANADIUM RECOVERY WITH SPECIAL REFERENCE TO VANADIUM IRON ORE**—F. E. Lathe—*Nat'l. Research Council of Canada*, 32 p., 25c.
- SEVENTY-NINTH ANNUAL REPORT OF THE COMPTROLLER OF THE CURRENCY**—*Gov't. Print. Office*, 427 p., \$1.
- A SHORT HISTORY OF CARDIOLOGY**—James B. Herrick—*Thomas*, 258 p., illus., \$3.50.
- THE STRUCTURE OF NETHERLANDS INDIAN ECONOMY**—J. H. Boeke—*Institute of Pacific Relations*, 201 p., \$2.50.
- TEXTILE FIBER ATLAS**—Werner Von Bergen and Walter Krauss—*American Wool Handbook Co.*, 63 p., illus., \$3.
- A THEORY OF MEANING ANALYZED** (General Semantics Monograph, III)—Thomas Clark Pollock, John Gordon Spaulding and Allen Walker Read—*Institute of General Semantics*, Chicago, 46 p., \$1.50.
- UROLOGY IN WAR**—Charles Y. Bidgood—*Williams and Wilkins Co.*, 78 p., illus., \$2.
- THE VERTEBRATE EYE AND ITS ADAPTIVE RADIATION**—Gordon Lynn Walls—*Cranbrook Institute of Science*, 785 p., illus., \$6.50.