Business and Personal.

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"U. S." metal polish. Indianapolis. Samples free. Presses & Dies. Ferracute Mach. Co., Bridgeton, N. J. Best baling presses. Ryther Mfg. Co., Watertown, N.Y G. D. Hiscox, 361 Broadway, N.Y., Consulting Engineer Universal and Centrifugal Grinding Machines. Pedrick & Ayer. Philadelphia, Pa.

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Screwmachines, milling machines, and drill presser The Garvin Mach. Co., Laight and Canal Sts., New York. Centrifugal Pumps. Capacity, 100 to 40,000 gals. per minute. All sizes in stock. Irvin Van Wie, Syracuse, N.Y. farm implement on the market. S. Remaly, Johnstown,

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Mr. Johan Koopmans, of the firm of Johan Koopmans & Co., commission merchants and agents of American manufacturers in Amsterdam, Holland, will be in the United States this month to solicit the representation of manufacturers and exporters. Would also solicit the agency of an American flour mill. For reference or further information, apply to Jos. Agostini, 62 Broad St., New York.

The Engineering Record, the recognized authority on municipal and building engineering, has recently been enlarged by the addition of a department in which notable industrial plants are regularly described and illustrated, the steam and power plants being a conspicuous feature. Recent publications include the great Ivorydale plant of Messrs. Proctor & Gamble, described in 23 columns and illustrated by 57 drawings. The steam plant at Ivorydale is separately treated in 13 columns and 31 drawings. The new foundry of Henry R. Worthington, at Elizabethport, N. J., 16 columns, 26 illustra-tions. National Meter Company's foundry and brass finishing shop, Brooklyn, 13 columns, 29 illustrations. Niagara Power Plant (now in process of publication), 6 columns, 6 illustrations. Steam power plant of the Dwight Manufacturing Co., Chicopee, Mass, 9 columns, 7 illustrations. Published Saturdays, 12 cents a copy. The Engineering Record, 277 Pearl St., New York,

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price.

Minerals sent for examination should be distinctly marked or labeled.

(4603) W. I. S. asks: 1. What is the

strongest electric battery known to science? How made? A. Practically the storage battery. For high

may be cited. A couple has been described which is supposed to give nearly 4 volts E. M. F. 2. What is the platinotype photographic paper coated with, and what is the developer used composed of? A. Platino type paper is coated withan iron and platinumsaltand developed on cold solution of or alate of potassium. It is a patented process. The prepared paper can be obtained from Willis & Clements, Philadelphia, Pa. 3. How may blue prints be copied with the camera? A. Blue prints may be copied by inserting an orange red glass screen in the camera behind the lens and giving three times the usual exposure. 4. How may I make good black ink suitable for a fountain pen? A. Try following: Concentrated borax solution, 4 parts: shellac, 1 part; aniline black, q. s. Or try an aqueous solution of aniline black. 5. How may I plate small articles without a battery, in silver or gold? A. For gold and silver plating try the following: Solution for Gilding Brass and Copper.-The following formula has been adopted for water wilding, as it is termed. Fine gold, 61/4 dwts. Convert the gold into chloride and dissolve in 1 quart of distilled water, then add 1 pound bicarbonate of potassium and boil the mixture for two hours. Immerse the articles to be gilded in the warm solution for a few seconds up to one minute, according to the activity of the bath. Silver Wash .-I want some one to help me place a valuable patented Mix 1 part chloride of silver with 3 parts pearlash, 11/2 parts common salt, and 1 part whiting, and rub the mixture on the surface of brass or copper, previously well cleaned, by means of soft leather or a cork moistened with water and dipped into the powder. When properly silvered, the metal should be well washed in hot water, slightly alkalized, and then wiped dry. 6. I inclose a substance which I found on breaking open piece of anthracite coal. Please tell me what it is. Guild & Garrison, Brooklyn, N. Y., manufacture steam A. The substance is a piece of shale or slaty coal. It seems intermediate between a true slate and coal.

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AND EACH BEARING THAT DATE.

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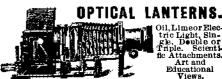
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