

Business and Personal.

The charge for insertion under this heading...

Acme engine, 1 to 5 H. P. See adv. next issue.

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HINTS TO CORRESPONDENTS.

Names and Address must accompany all letters, or no attention will be paid thereto.

(4594) W. F. W. asks: Will you kindly advise me through the columns of the Scientific American...

(4595) A. L. writes: I notice in your issue of November 5, 1892, an answer to Mr. E. Kurtz's question...

(4596) J. H. M. asks: The sewer running from my dwelling in this city to the street main became stopped up...

(4600) P. B. asks: What style of pump and power would be most suitable to raise water from wells...

(4601) R. C. P.—There is no easy way of increasing the gloss on your celluloid collars.

ago, there was a back water from the main street sewer. The part of the pipe where the growth occurred was many feet underground...

(4597) N. Y. Z. says: Will you give a recipe for making the gelatin-like sheets which are in a duplicator for duplicating handwriting...

(4598) J. D. says: I have a building I want to heat with exhaust steam. Will you please answer the following questions through your paper?

(4599) E. E. B. asks: 1. Can old crucibles be used over by crushing them up fine, and mixing cement with and forming them over again?

(4600) P. B. asks: What style of pump and power would be most suitable to raise water from wells, one 60 and the other 160 feet deep?

(4601) R. C. P.—There is no easy way of increasing the gloss on your celluloid collars.

(4602) W. E. Y. asks: If a gas on expanding does external work, will it require as much mechanical energy to reduce it to its original bulk...

square inch? A. The work of compressing a gas is the same, whether it has done work in expanding or not.

TO INVENTORS. An experience of forty years, and the preparation of more than one hundred thousand applications for patents at home and abroad...

INDEX OF INVENTIONS

For which Letters Patent of the United States were Granted November 15, 1892, AND EACH BEARING THAT DATE.

[See note at end of list about copies of these patents.]

- Advertising cabinet, D. B. Lincoln. 486,113
Alarm, See Electric alarm. 486,380
Animal clipper, E. A. Firestone. 486,372

- Fibrous material for making pulp, J. & G. Johnson. 486,389
Filter, water, Siegrist & Bittman. 486,413
Firearm, breech-loading, J. M. & M. S. Browning. 486,377