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### The Rice Crop.

The "Georgetown Times" says:—"The last rain we have had was on the 28th August.—Since that the wind has been at N. E., giving us a delightful cool change, and making a delightful time for the rice harvest, which has generally commenced, and with the prospect of an average crop. The large fields, gently fanned by the wind and shaking the golden grain, present a most interesting sight, and if the present prices continue, will gladden the hearts of our planters.

The "Savannah News" says:—"We are now at the first day of autumn, and it is with much pleasure that we state that the harvesting of the rice crops, which with us takes place during the last days of August, is now nearly finished, that the weather has been most propitious, and the crops will yield well.

The weather has now turned cooler, with a clear sky and healthy atmosphere.

[This is cheering news. Good crops safely harvested, is profitable and beneficial both to those who plant and reap, and those who buy and eat.

### The Meteor.

A splendid meteor was seen by many persons in this city on the evening of Friday, last week. It passed with great velocity from East to West, and appeared to be about the size of the full moon—a huge globe of light, with a luminous tail of great length and brilliancy. Many superstitious notions were at one time connected with meteors, as well as comets. They were termed by the illiterate *fiery Dragons*, and were held to be procrastinators of calamitous events, both to nations and particular families. They were looked upon as the signs of death to some member of the family over whose house one was seen passing. With the light of knowledge, such superstitions are fast fading away. Still, we are very ignorant of what those meteors are, and we have yet much to learn.

### Danger from the Comet.

Professor Jewett, of North Carolina, it is said, has predicted that the comet which is now on a visit to our system, will cross the orbit of our planet at such a point as to influence our globe, perhaps deluge it with water by its tail swashing into the Pacific or Atlantic oceans, and sending up the spray far higher than the mountains of the moon. We have no fears of such a result, but if it comes, we cannot help it. If it were a case of electric discharges, we would at once refer the subject to Mr. Merriam.

### Another Fire Annihilator Exploded.

For some time past, one of Phillips' Fire Annihilators has been on exhibition at the Merchant's Exchange News Room, Boston. On Monday morning the 5th inst., this machine exploded, filling the room with a dense smoke, which greatly alarmed the inmates, who forthwith decamped.

Where were Barnum and Dr. Colton?

### Cruelty to Animals in New York.

No less than 577 horses died in New York during the last month. There is more cruelty displayed to animals in New York, we believe, than in any other city in our country, perhaps in the world.

## IRVING'S STEAM BOILER.

Figure 1.

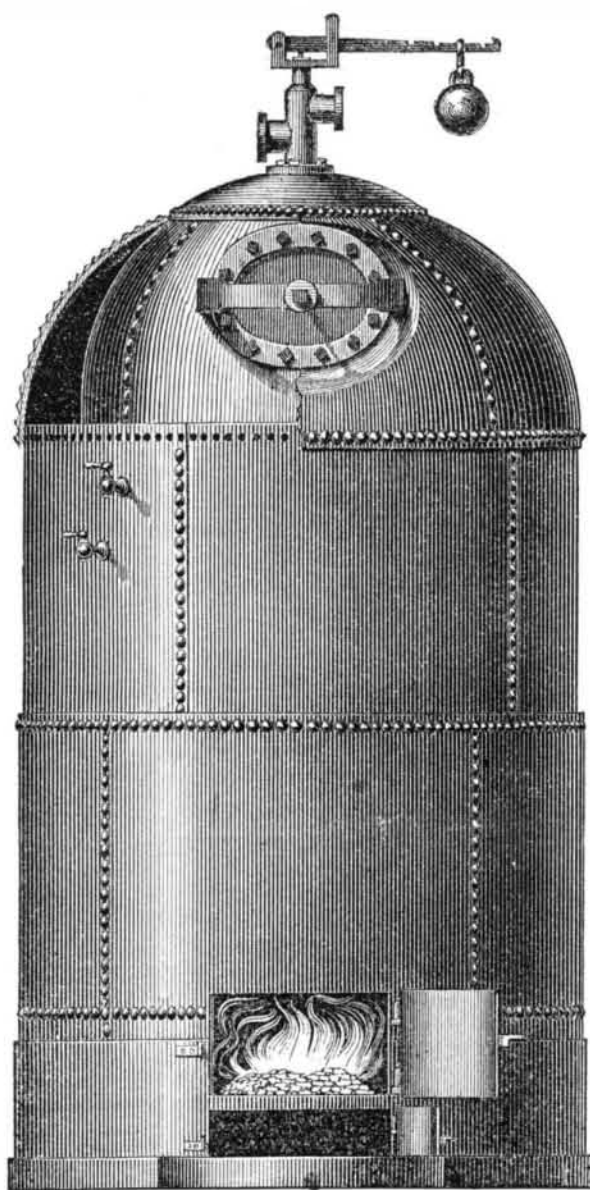
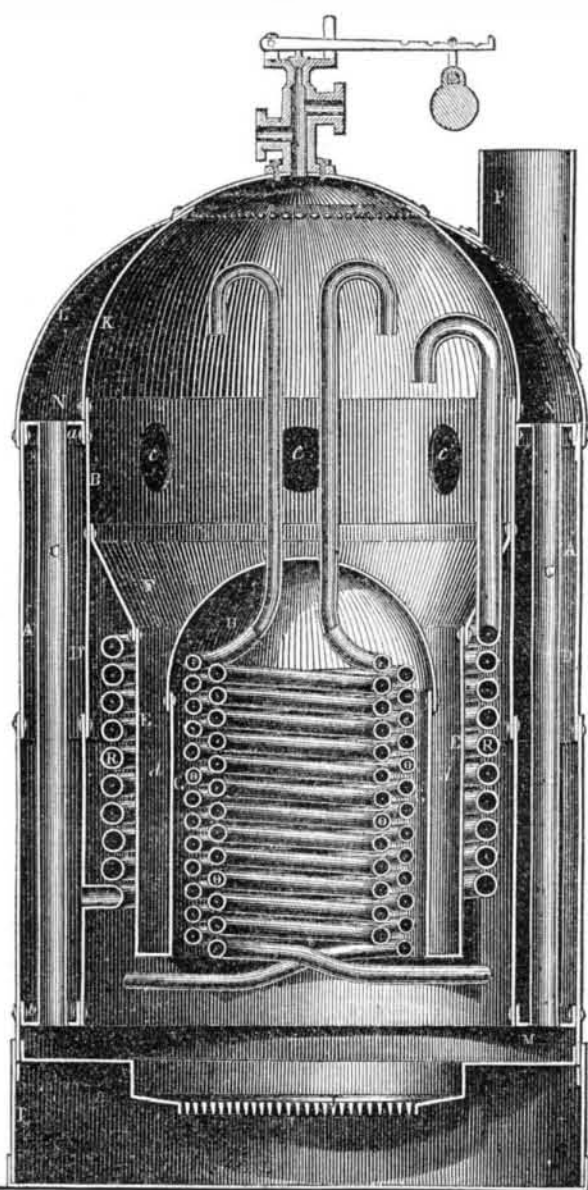


Figure 2.



The annexed engravings are views of the improvements in Steam Boilers, for which a patent was granted to Benjamin Irving, of Green Point, L. I., and assigned to the Irving Boiler Company, of this city, on the 30th ult., the claim of which was published by us last week.

Figure 1 is an outside view of the boiler; figure 2 is a vertical section of it, and figure 3 is a plan view. The same letters refer to like parts. The improvements which are comprehended in this boiler, have in view a more perfect combustion and saving of fuel. A very large heating surface is presented without subjecting any part of it, when working properly, to a very intense heat. It is guarded against explosions, and combines compactness and strength. Economy in fuel and construction, safety, strength, and durability, are therefore claimed as the results of this invention.

The outer shell of the boiler consists of an outer vertical cylinder, A, within which is a smaller cylinder, B, of nearly the same height. The shell, A, and the cylinder, B, are united at the bottom and near the top by two annular plates, a and b, to which are fitted the ends of a series of tubes, C C, which are placed at equal distances in the annular space, D. The cylinder, B, terminates at the upper end in a dome, K, and the cap of the shell, A, consists of a dome, L, which is less concave than K, and meets it near the centre. Within the cylinder, B, is a shorter and smaller cylinder, E, whose upper end is united by a hollow frustum of a cone, F, to B. Within the cylinder, E, is another one,

G, united to E, at the bottom, and terminating in a dome, H, at the top; I is a circular base or foundation which may be of cast-iron, upon which rests the cylinders, A and B; it forms the ash pit and fire place, and supports the fire grate, J, which is of a circular form, and lies under the interior cylinders. Around the top of the fire place, and below the annular plate, there is a circular flue, M, connected by tubes, C C, with the flue, N, between the upper domes. O O, are two coils of lap-welded pipe within the cylinder, G; their lower ends communicate with the lowest part of the space between cylinders, A B, their upper ends rise through the dome, H, and pour their contents into the steam-chamber. The space, D, between, A and B, and the space, d, between cylinders, E G, not occupied by pipes, C C, are "water jackets;" c c are holes forming communications with the inner and outer water jackets, at top and bottom, having the effect to keep the water in them level; R R is a coil of pipe inside of the outer water jacket, and entering it at the lower end, which may be used to dry the steam, or for generating steam.—When used for the former purpose, the steam is conducted from the chamber, K, through a pipe into the coil, R, and carried out for use to the engine by a pipe for that purpose. When the coil, R, is used to generate steam, the upper end of it is carried through the dome, H, and its contents are emptied like the inner coils into the steam chamber. There may be one or more coils within and outside of the inner water jackets, and they may be connected at the bot-

tom with one or both water jackets. The coils and water jackets may be increased or diminished in boilers, made in this manner, as desired. The water is contained in the water jackets, but not in the coils for generating steam. The action of the heat of the fire upon the heating surfaces, tends to draw the water from the jackets into the coils, making it flow upwards through them, and into the steam chamber above, in a continual stream or streams, so that the pipes are kept full; while there is any water in the jackets, the water is kept circulating continually through the coils into the steam chamber, and from the steam chamber down through the water jackets, and from them into the coils again, and so on continually. If the water gets low in the water jackets, the water that flows through the coils into the steam chamber keeps the surfaces moist, thereby preventing the plates from burning, and obviating the danger of explosions. The heating surfaces of the boiler consist of the cylinders, G E, the greater part of cylinder, B, the coils of pipe, the cones, H, K, and F, and the tubes, C C. The products of combustion rise into cylinder, G, and between cylinders B and E, and heat the coils and other surfaces. The heat also passes through the flue, M, into the pipes, C C, and into

[Continued on the next page.]