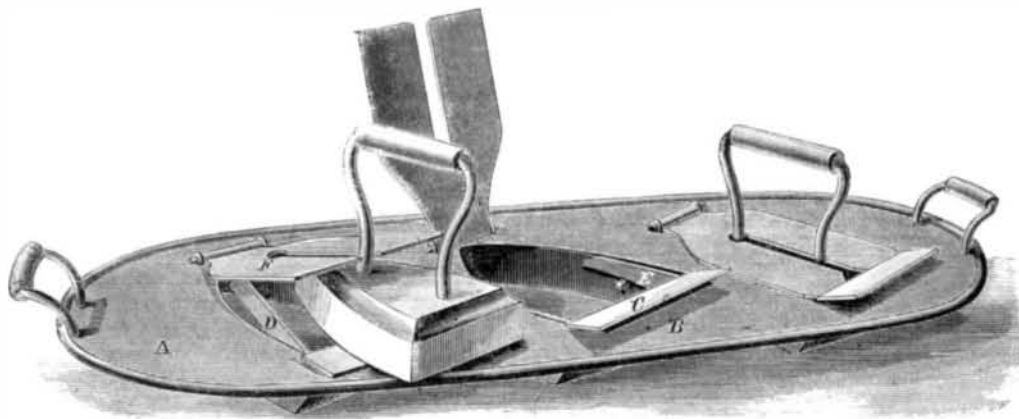


**Improved Sadiron Heater.**

This simple utensil is intended to facilitate heating sadirons and economize coal, both of which are perfectly attained by it. Heating irons on the stove or range is a very expensive practice, for a great fire has to be kept up, and a large proportion of the heat is radiated. In summer time this is particularly objectionable, for the fuel is not only wasted but the apartment is rendered exceedingly uncomfortable. The heater shown herewith is a capital thing for the purpose and should be found in every family. The heater sits in the stove, as usual, and has recesses or pockets, A, in which the irons are placed. These recesses are covered so that the iron is really in a pocket, exposed to the heat, but protected from



**BLEYER'S SADIRON HEATER.**

the air. The handles are also kept cool, or at least at a much lower temperature than when this heater is not used. The pockets can be removed separately when burned out, provision being made for that object.

By looking on the engraving at B, a metallic plate, C, will be observed. When the iron is to be entered, this plate tips up, as shown at D; the iron being set on it throws the back arms, E, up, as shown in the figure of the iron, thus raising the cover, F, and allowing the iron to be put in place. By merely setting the iron on the plate, C, therefore, the cover opens and the iron may be put in the recess without using any instrument or lifter to raise the covers. This ingenious device cannot get out of order, and is so simple that the most stupid servant cannot misunderstand it. It was patented through the Scientific American Patent Agency, on the 18th of Oct., 1864, by Henry W. Bleyer; for further information address him at 380 Michigan street, Buffalo, N. Y.

**Meteoritic Rain.**

The Paris correspondent of the *Chemical News* states that a curious experiment has been made by Dr. Reichenbach, of Vienna. He believes in the existence of a cosmical powder or dust which exists all through space, and which sometimes becomes agglomerated so as to form large and small meteorites, while, at other times, it reaches the surface of our earth in the form of impalpable powder. We know that meteorites are mainly composed of nickel, cobalt, iron, phosphorus, etc. Dr. Reichenbach went to the top of a mountain which had never been touched by spade or pickax, and collected there some dust, which he analyzed, and found it to contain nickel, and cobalt, and phosphorus, and magnesia. People have wondered where the minute quantity of phosphorus so generally distributed on the surface of the earth came from. The doctor, however, has discovered it in this mysterious invisible rain, which henceforth must be looked upon as quite as necessary for vegetation as the water which falls from the clouds.

**Still Thinner Iron.**

The *Birmingham Daily Post* says: "The 'thinnest sheet of iron yet rolled in the world,' has elicited numerous competitors in this country, and has at last been signally beaten. The sheet in question was the 1,000th part of an inch in thickness. The other day we mentioned that iron had been rolled at Cardiff considerably thinner, and since then some iron still thinner, rolled by Messrs. James, of Bilston, has been shown to us by Mr. Brinton, of Great Charles-street, in this

town. Yesterday two other samples came to hand. One of them, rolled from common iron in the ordinary sheet mills, by Messrs. Robert Williams and Co, of Swan Village, Westbromwich, is 1,015th part of an inch thick, is very tough, and has a very good even surface. The other specimen, which at present bears away the palm, consists of two sheets, measuring 8in. by 5½in., weighing respectively 49 and 49½ grains, and being the 1,400th part of an inch in thickness! These marvellous examples of iron rolling were produced by Messrs. Nevill, Everitt, and Co., of the Marshfield Iron-works, Llanelly. The Messrs. Everitt, of Kingston Works, in this town, are partners in this firm; and therefore, a Birmingham house may finally claim the credit at first taken by our ironworker at Pittsburg,

tion with great facility. The upper part of the shank has a recess, F, in it which carries a spring, G; this spring is larger than the tube and collapses or closes when the shank is pushed on to its place, thus while the shank can revolve in the tube it will not slip out when the article to which it is secured is lifted off the floor. There is in addition a loose collar, H, which steadies the lower portion of the shank and renders it at all times easy working. The caster proper may be pulled out of its socket and oiled, if necessary, in a moment, and reinserted when necessary. In other respects this is a strong and well made caster, and one likely to give good satisfaction. A patent was procured on it through the Scientific American Patent Agency, on the 25th of November, 1864, by J. M. Riley, of Newark, N. J. For further information address Riley & Smith, No. 30 North Broad street, Newark, N. J.

THE graceful and self-teaching system of Babbittonian Penmanship, which we commended in this journal two weeks ago, is now published by Babbitt & Wilt, at No. 37 Park Row, New York. Terms (post paid) \$1.50.

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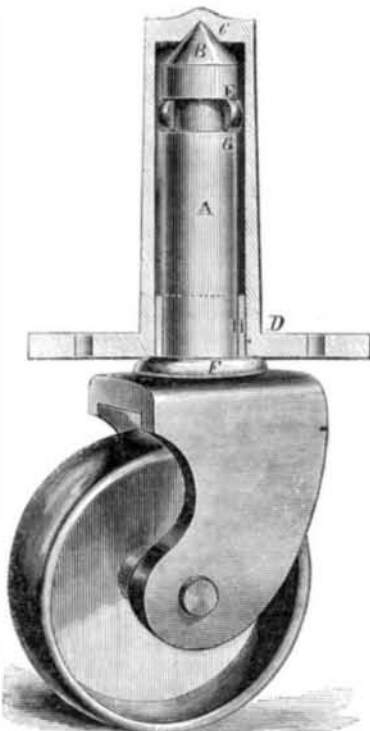
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the Birmingham of the United States. It should be added that one of the specimens sent us by Messrs. Nevill and Everitt, is beautifully finished; the other is left just as it came from the rolls, not having been annealed."

**RILEY'S CASTER.**

The object of this invention is to procure a strong, durable and easy-working caster for pianos, chairs, tables, and other furniture. It resists any lateral strain to which it may be subjected in moving the furniture, and at the same time conforms easily to the direction in which the table or chair is to be moved.



The engraving published herewith is a section of the tube and an elevation of the roller; the section shows the details of the improved portion. The shank, A, of the caster has a pointed end, B, which fits in a center, C, in the tube or socket, D. This center sustains the weight of the piece of furniture, and the collar, E, below, has little or no friction upon it, thus allowing the roller to conform to any direc-