

G. WRIGHT.
 Locking-Seam for Metal-Ware.

No. 204,936.

Patented June 18, 1878.

Fig. 1

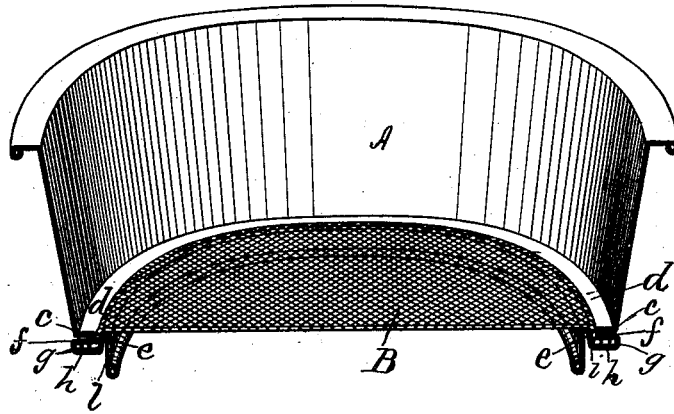


Fig. 2

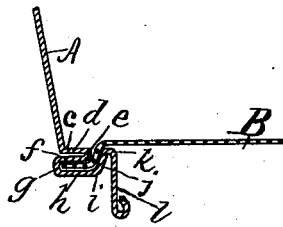
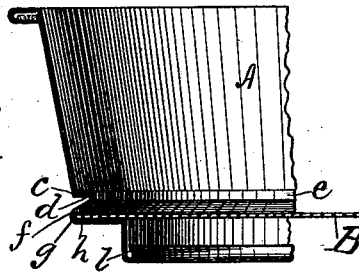


Fig. 3

Attest:

John Halsted
John J. Darby

INVENTOR:

George Wright
 by *John J. Halsted*
 his Atty.

UNITED STATES PATENT OFFICE.

GEORGE WRIGHT, OF CHICAGO, ILLINOIS, ASSIGNOR TO HELEN M. MARCY,
OF SAME PLACE.

IMPROVEMENT IN LOCKING-SEAMS FOR METAL WARE.

Specification forming part of Letters Patent No. **204,936**, dated June 18, 1878; application filed
April 19, 1878.

To all whom it may concern:

Be it known that I, GEORGE WRIGHT, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Locked Seams for Metal Ware; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My present invention relates to that class of sieves the body of which is formed of a single band or hoop of metal, and is an improvement on the construction shown in my Patent No. 153,881, dated August 4, 1874. It has for its object the uniting of the hoop with the wire-cloth by a better-locked seam and the production of a stronger and more durable, as well as a cheaper, sieve than any reliable one known to me; and it consists in the special manner in which the metal forming the hoop which constitutes the body of the sieve is spun or shaped to secure these ends.

Figure 1 is a vertical cross-section, in perspective, of a sieve made in accordance with my invention; Fig. 2, a partial vertical section, showing a stage of the manufacture prior to the final spinning or shaping of the interlocking seam and of the interlocked edge of the wire-cloth; and Fig. 3, a cross-section of the locked seam complete.

The hoop or body of the sieve is shown at A and the wire-cloth at B in all the figures. At that part in the body at which the locking-seam commences (and which should be far enough from the lower edge of the metal to allow for the required bending, doubling, and retroverting of the metal, and also for a bottom rim or support) the metal is spun or bent inward, as at *e*, so as to form a horizontal internally-projecting rim, *d*. It is then bent down and turned outward or retroverted, as at *e*, thus forming a doubled part, *d f*. It is then again bent down, as at *g*, but is thence turned again inward, as shown at *h*, but to a distance greater than the breadth of *f*, and is

then bent upward and at a point at or about the level or plane of the horizontal part *d*; and it is then bent downward to form the base or support *l*. In this condition, as seen in Fig. 2, it is ready to have the wire-cloth applied, and to go through the next step or process of closely and tightly uniting them together, but without the use of solder; and this is effected by any appropriate operation or machinery which will compress or flatten the portions *d f* and a portion of *h* to planes nearly or about parallel to each other, and which will also spin or bend upward, as at *i j k*, the innermost portion of *h*, so as to form a corrugation or shoulder. This bend, corrugation, or shoulder *k* performs several functions, namely: It bends the wire-cloth upward, and thereby strains it tightly. It gives a double curvature to this cloth in two opposite directions. It binds the cloth between the two bends *e* and *j* of the metal, in addition to the gripe already given it between the parts *f h*; and it affords an easy rounded support where the wire-cloth rests upon the metal at *k*, thus tending to enhance its durability under the pressure it receives when in use.

It will now be further seen that the body of the sieve is also very strong where strength is most needed, having two horizontal folds and three horizontal thicknesses, forming an inwardly-projecting annulus or ring; and that the foot or base *l*, by reason of its double or corrugation at *i j k*, is also correspondingly strengthened, not only to support the sieve and its contents, but also to resist the pressure attending upon the operation of rubbing the flour or other material over the wire-cloth while sifting.

While it is unnecessary here to describe any mechanism for making my improved sieves, I will state that I preferably make them by what is known as the "spinning process," though they may be made by any other method, my present invention consisting in the article produced.

By my construction cross-wires are not needed.

It will be evident that my improved locked seam may be used to interlock with the band or

body of other material than wire-cloth or wire-gauze—as, for instance, sheet metal—thus producing a can, kettle, &c.

I claim—

1. The shoulder *k*, projecting upward above and in conjunction with the horizontal parts *f* *h* of the same piece of metal, as and for the purpose described.

2. The metallic locked seam described, formed

of the inwardly-bent part *d*, the outwardly-bent part *f*, and the inwardly, upward, and downward bent part *h j l*, and the wire-cloth or other material interlocked therewith, substantially as shown and described.

GEORGE WRIGHT.

Witnesses:

E. T. PRINDLE,

AUGUSTUS PARSONS.