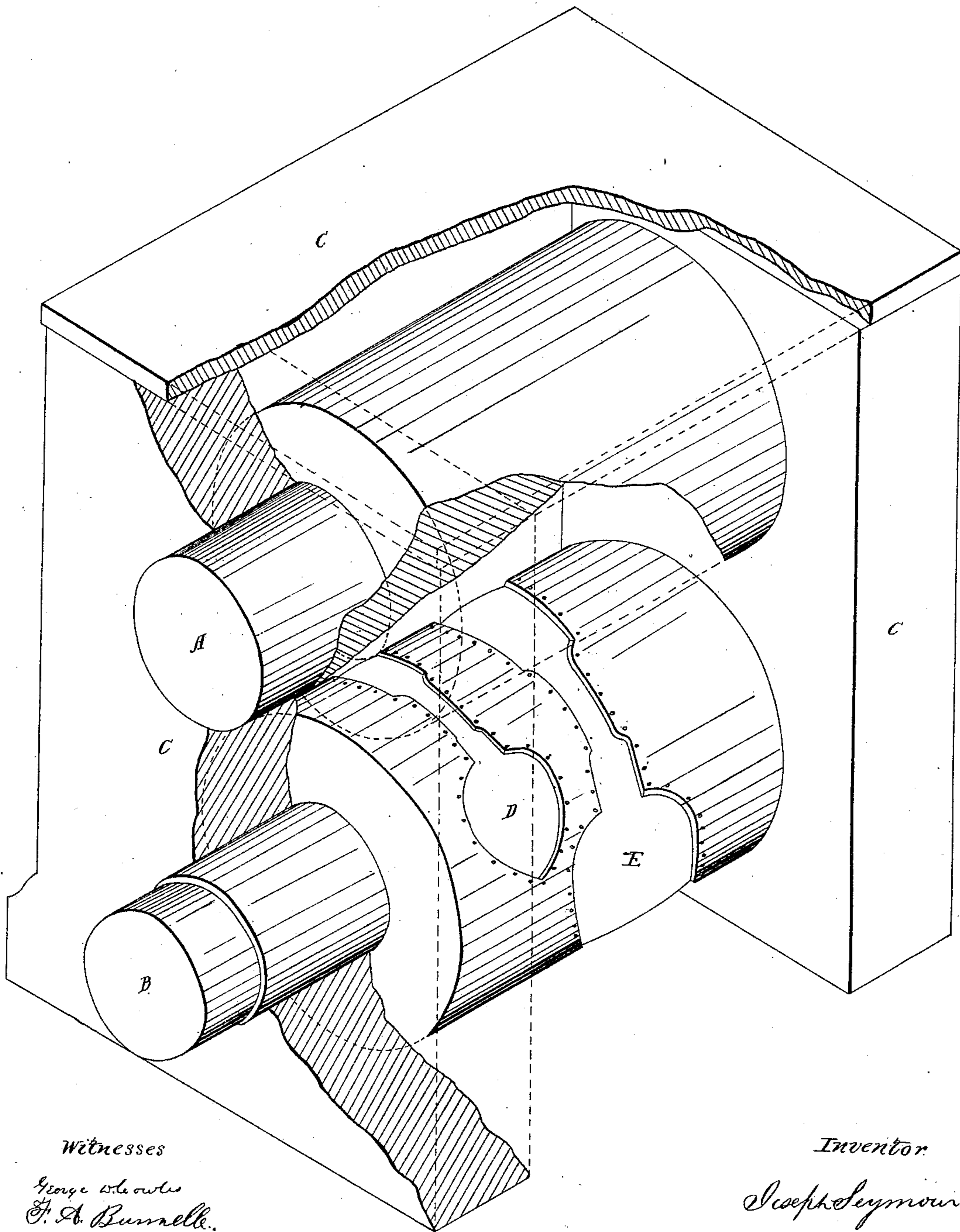


*J. Seymour,
Making Spoons.*

N^o 25,765.

Patented Oct. 11, 1859.



Witnesses

*George A. Lewis
J. A. Bunnell.*

Inventor

Joseph Seymour.

UNITED STATES PATENT OFFICE.

JOSEPH SEYMOUR, OF SYRACUSE, NEW YORK.

SPOON.

Specification of Letters Patent No. 25,765, dated October 11, 1859.

To all whom it may concern:

Be it known that I, JOSEPH SEYMOUR, of Syracuse, in the county of Onondaga and State of New York, have invented a new and useful improvement on the Machine or Apparatus used for the manufacture of plain spoons, ladles, knives, forks, and other plain articles made of silver or other metal, known as "the rolls" or as a "set of rolls," and the title of the machine as improved is "Seymour's margin rolls"; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing, making a part of this specification, and representing a perspective view of said machine as improved.

C, C, C, represent a frame, made of cast iron of any of the known forms; A and B, two steel rolls which may be of any convenient diameter and length secured to said frame in the usual manner and made to revolve by gearing into a toothed wheel attached to the end of each roll or by a crank or any other way.

D and E represent respectively the form or figure of a tea and table spoon; all the parts of which are in the same plane or nearly so; or in other words of a tea and table spoon in which the bowls are flattened out; cut into the roll B at just such depth from its surface that when the metal blank of which the spoon or other article is to be made passes between the rolls A and B it will be reduced at all points in contact with the form or figure cut in B to the exact thickness of the same points in the spoon or other article when finished; and so much larger than the finished spoon or other article, that the same can be cut, by a punch of any desired shape or pattern, out of the metal blank after the same shall have been passed between the rolls, and entirely within the margin or edge of the impression made upon the metal blank by the form or figure cut in the roll B.

The manner of operating said machine so improved is as follows: A bar of silver or other metal is reduced to the proper thickness for the spoon or other article to be made and is then passed under a punch which cuts out what is called a blank, of such size as to contain sufficient metal for the desired article. This blank is then passed between the rolls marked A and B set at the proper distance apart and in such

a manner as to receive the impression of the required figure cut in B after which the metal blank is passed under another punch of the desired size and pattern of the spoon or other article which is cut out therewith and bent into shape for the finisher.

I do not mean to limit myself to the particular forms or figures cut in the roll B, represented by D and E but to include also forms or figures of other spoons, ladles, forks and other articles to be made plain cut into the roll in the same manner; nor that the forms or figures above mentioned shall always be cut in the lower roll B since A and B may be made to exchange places with each other being generally of the same size or a part of the form or figure may be cut into one roll and a part into the other and bring about in operation substantially the same result.

I do not claim the rolls in themselves as my invention as plain rolls have been long in use for reducing bars of metal to a required thickness and I am aware that rolls have been made and used, into which the former figure of some of the above mentioned articles have been cut, a part into one roll and a part into the other. Now the form or figure of any article which has ever been cut upon these rolls heretofore, has always been cut of the exact size of the same article when finished and the metal blank when passed between these rolls having this form or figure so cut upon them received an impression therefrom, of the exact size of the same article when finished and outside of this impression was a surplus portion of metal thrown out by the action of the rolls upon the blank; called a fin which had to be filed off up to the edge or margin of the impression which also formed the edge of the finished article. I have used these rolls and have always found these two objections attending their use: First. This fin or surplus portion of metal thrown out beyond the edge or margin of the impression by the rolls upon the blank had to be removed, and this has never been done by a punch nor can it be well done with one but it always has been done by clipping it off somewhat with a pair of shears and removing the balance with a file which was a process so slow and tedious that nothing of any consequence was gained by the use of such rolls over the old way of shaping the article entirely by hand. Sec-

ond. Since the form or figure of any article cut upon these rolls was always cut of the exact size of the same article when finished it followed that when I desired to enlarge
5 the size of the article, or to change the shape of it so as to form one of a new or different pattern I had to get a pair of entirely new rolls cut at considerable cost both of money and time.

10 Now my improved rolls differ from those above described in this essential particular: that the form or figure of any article cut upon the roll B (and it may with the same result be cut a part in one roll and a part in
15 the other) is not cut of the exact size of the same article when finished as is the case with the rolls above described and of all heretofore made but considerably larger whereby both of the above named objections
20 are entirely removed. For in the first place the form or figure of any article being cut upon one or both of the rolls larger than the same article when finished the impression made upon the metal blank when passed be-
25 tween them was also larger than the finished article so that the article itself ready for the finisher in most cases could be cut with a punch of the exact size of the finished article out of the metal blank after it had been
30 passed between the rolls and entirely within the edge or margin of the impression made upon the blank by the form or figure cut into the roll or rolls thus by one operation entirely removing the fin and also so much
35 of that part of the blank bearing the impression of the form or figure cut into the roll or rolls as was greater than the finished article thus doing away with the first objec-

tion. In the second place the impression made upon the metal blank when passed be- 40
tween these improved rolls by the form or figure of any article cut thereon being considerably larger than the same article when finished the size of the article could be en-
45 larged and its shape changed to conform to any desired pattern without any change of rolls by simply having a punch made of exact shape of the desired pattern and of the exact size of the enlarged article when
50 finished which costs much less both in time and money than a new roll or rolls thus obviating the second objection.

Having thus explained the manner of constructing and operating my improvement upon the rolls and wherein it differs from 55
anything heretofore made I now claim as my invention and desire to secure by Letters Patent—

The machine known as "the rolls" having the form or figure of any article to be 60
made up plain of silver or other metal cut upon one or both of them so much larger than the same article when finished that the article itself can be cut with a punch of the
65 desired size and shape out of a piece of metal after it has been passed between the rolls and entirely within the margin or edge of the impression made upon the metal by the form or figure cut into one or both of the rolls, substantially as herein described 70
and set forth.

Syracuse, September 22nd, 1859.

JOSEPH SEYMOUR.

Witnesses:

GEORGE D. COWLES,
F. A. BUNNELLE.