

(No Model.)

O. MONROE.

PROCESS OF TREATING PYROXYLINE SCRAPS.

No. 244,916.

Patented July 26, 1881.

Fig. 1.

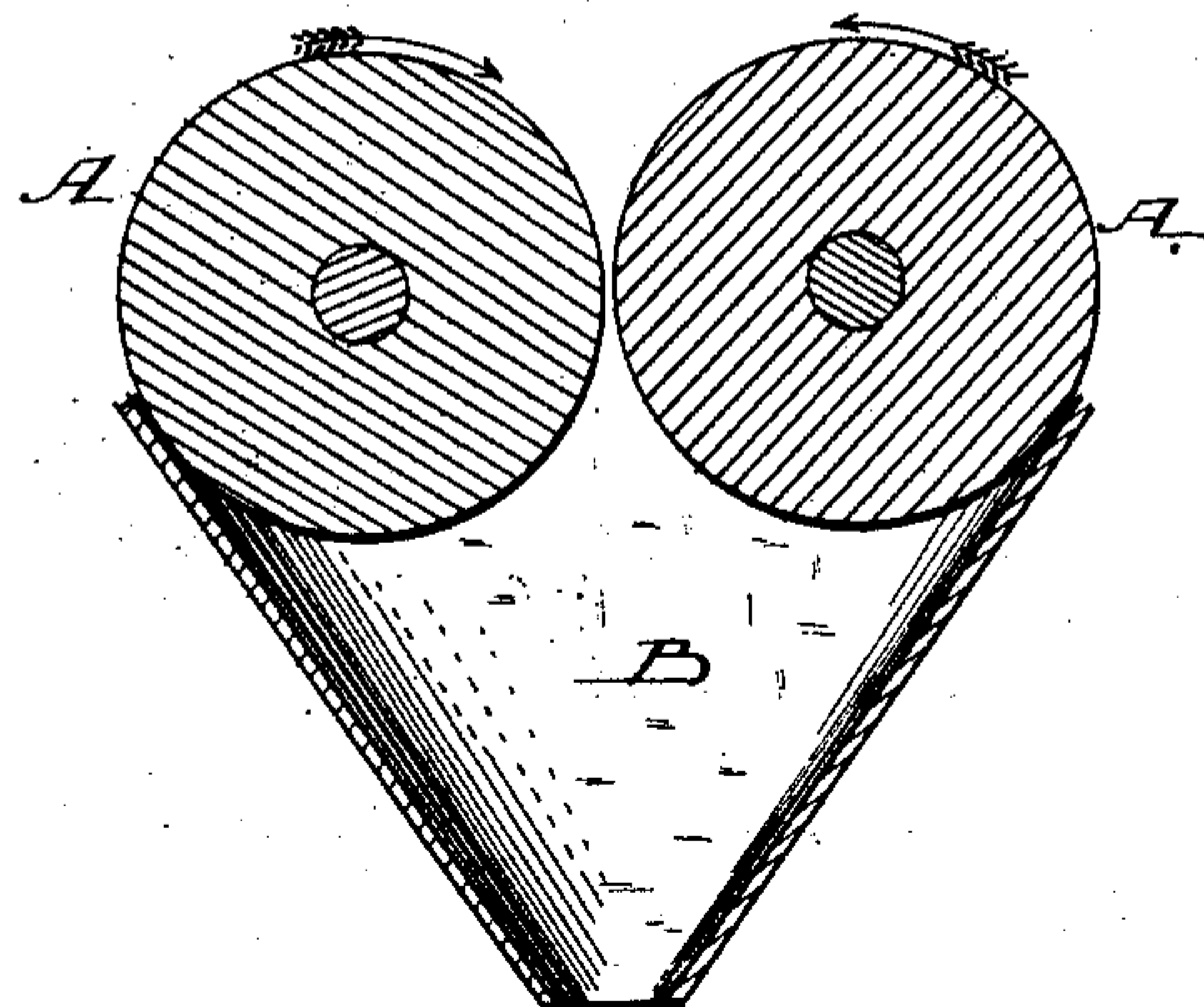
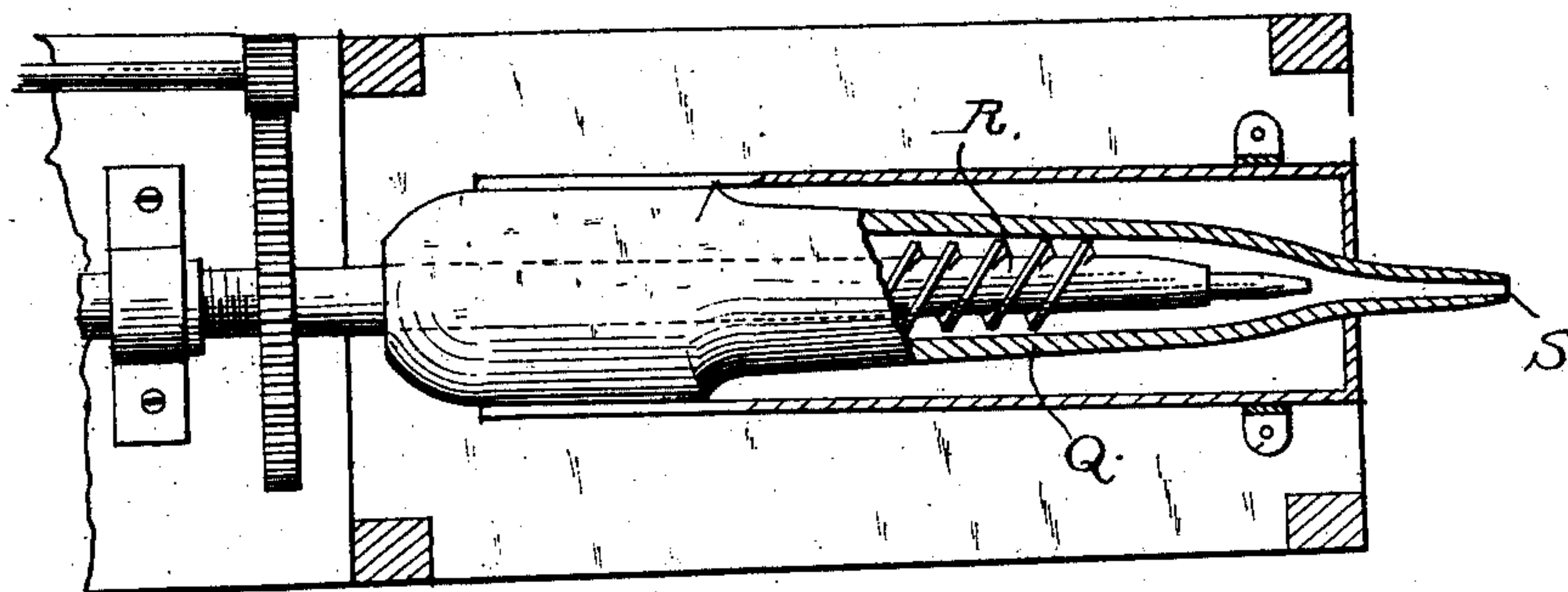


Fig. 2.



Witnesses;

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PROCESS OF TREATING PYROXYLINE SCRAPS.

SPECIFICATION forming part of Letters Patent No. 244,916, dated July 26, 1881.

Application filed January 3, 1881. (No specimens.)

To all whom it may concern:

Be it known that I, ORLANDO MONROE, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful
5 Improvement in Processes of Treating Pyroxyline Scraps, of which the following is a specification, reference being had to the accompanying drawings.

In the manufacture of compounds of pyroxyline perhaps the most important consideration is the proper admixture and compression of the material. The mere grinding of the elements, even though it be so performed as to effectually intermix and blend them, will not
10 insure the effectuation of a good result unless the intermixture be supplemented by a compression of the material, such as will impart to it a suitable degree of even solidity. Another highly important consideration is the
15 proper admixture of the coloring agent, particularly where what is known as "scrap" is made use of, and especially where the scrap is composed of pieces or dust of different shades.

To provide a means of accomplishing an effectual mastication and compression of the compound, as well as a suitable admixture of the coloring agent, are the objects of my invention, which are effected in the manner hereinafter described.

30 The distinctive novelty of the process consists in first treating the compound with any appropriate solvent and then subjecting it to the action of a machine whereby it is masticated and compressed, the coloring agent being introduced, if desired, before the mastication is attempted.

In practicing the process, almost any machine may be used which serves to effectually masticate or mix the material, and at the same
40 time to cause it to be properly forced or moved through a mouth or aperture, the mouth or aperture being of such a size as to effect the proper compression. Thus, if preferred, a device such as is illustrated in Fig. 1, in which
45 A A are mixing-rollers of ordinary construction, and B an attachment in the nature of a nozzle, may be successfully used. The material, being fed in between the rollers A A, is thoroughly mixed or masticated, and being
50 moved through the nozzle or part B, is solidified to form a homogeneous mass of the proper

consistency. If preferred, the part B may be made adjustable by any convenient means, so that the solidity of the material may be increased or diminished at pleasure, according
55 to circumstances.

It is quite important, as will be readily understood, that the nozzle or discharge-orifice of the apparatus which is employed in practicing the invention should be of a suitable diameter to accomplish the proper compression or semi-solidification of the material without causing it to be solidified to an undue extent. If the nozzle be too large, the material will be delivered in such form that it will be comparatively valueless, and if the nozzle be too small, great difficulty will be experienced in expelling the material from the machine, and when expelled it will be so nearly solidified that its value will be greatly diminished. The shape
60 of the nozzle will of course be varied according to the objects for which the material is intended to be used.

The machine I prefer to use is shown in Fig. 2, and consists of a cylinder, Q, which contains
75 a screw or threaded shaft, R, operated in any convenient manner. The cylinder Q is provided with a nozzle or outlet, S, of reduced diameter, through which the material is moved by the rotation of the screw or shaft R. The
80 material having been reduced, if necessary, to a convenient size to be introduced into the machine, is first treated with a solvent of any appropriate nature, such as alcohol, wood-naphtha, &c. If the compound is in what is known
85 as a "green" state, it will answer to merely dip it in the solvent, permitting it to remain for a few moments, which will cause it to take up a sufficient quantity of the solvent to effect the desired result. If it is in the form of seasoned
90 scrap, it will be immersed in the solvent and permitted to stand for a period of, say, from one to twenty-four hours, more or less, according to circumstances. It will then be introduced into the machine, the machine, by preference,
95 having been heated in any convenient way.

If it be desired to color the material, the coloring agent will be added before the material is introduced into the machine, and, if scrap of different colors is used, will be of such a shade
100 as to cause the resultant material, when completed, to be of a uniform color.

I do not claim to be the inventor of the machines which I have described, as they are not new in the arts; but I am the first to discover a method whereby they may be made available in the successful treatment of compounds of pyroxyline.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The process herein described of rendering homogeneous compounds of pyroxyline, which consists in treating the compound with a solvent and then subjecting it to the action of a machine which operates to first mix it and then compress it by forcing it through an outlet or nozzle.

2. The process herein described of rendering

homogeneous compounds of pyroxyline in the form of scrap of different colors, which consists in treating the scrap with a solvent and adding a coloring agent, and then subjecting it to the action of a machine which operates to first mix it and then compress it by forcing it through an outlet or nozzle.

In testimony that I claim the foregoing improvement in processes of treating pyroxyline scraps, as above described, I have hereunto set my hand this 21st day of March, 1881.

ORLANDO MONROE.

Witnesses:

GUSTAV OTTO,

ANDREW J. CORSED, JR.