

(No Model.)

J. B. MORGAN.
TOOL HEATING DEVICE.

No. 485,584.

Patented Nov. 1, 1892.

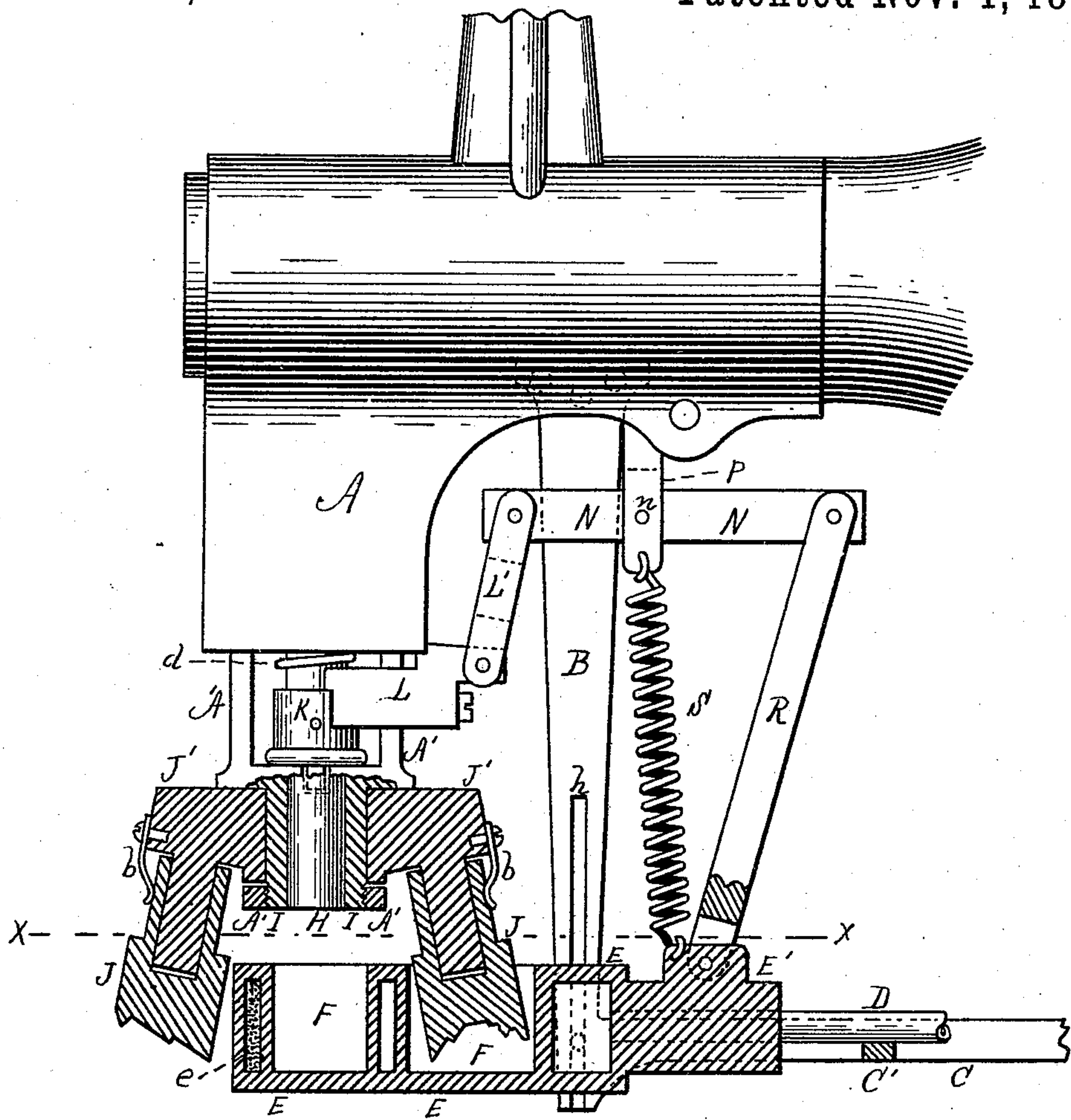


FIG. 1.

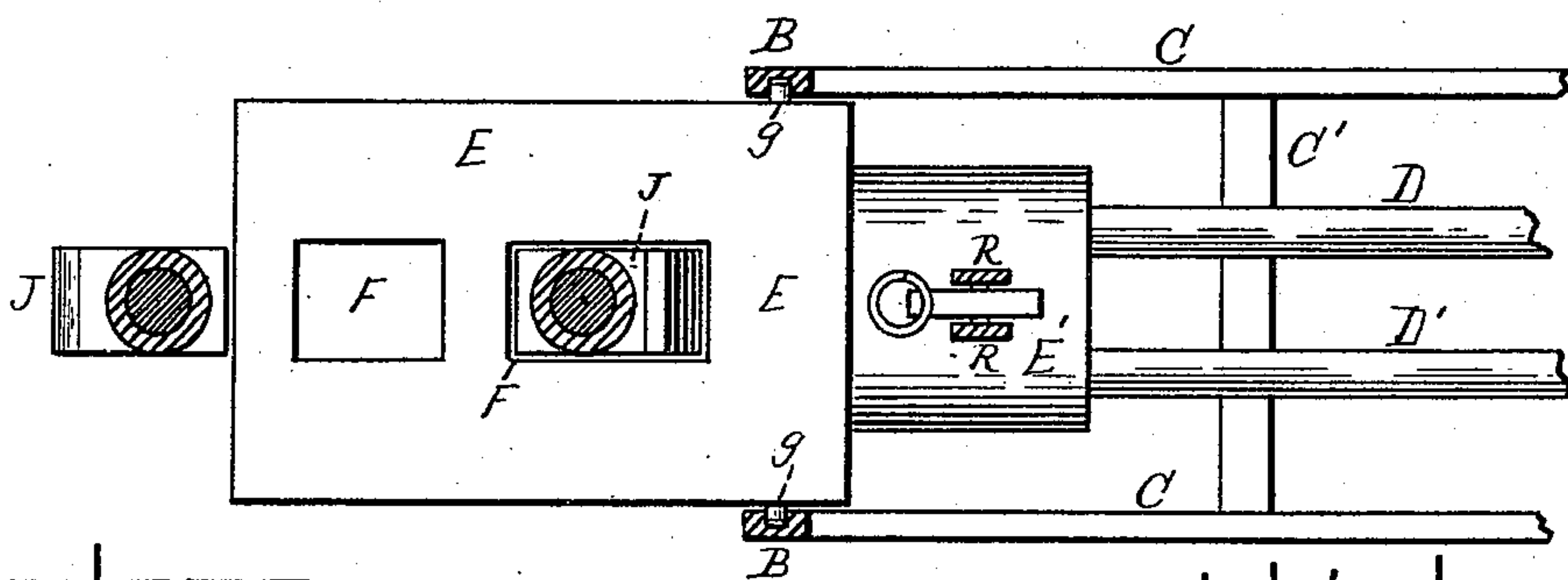


FIG. 2.

WITNESSES.
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JOHN B. MORGAN, OF MIDDLEBOROUGH, ASSIGNOR, BY MESNE ASSIGNMENTS, OF ONE-HALF TO THE ROTARY STEAM JOINT COMPANY, OF ROCKLAND, MASSACHUSETTS.

TOOL-HEATING DEVICE.

SPECIFICATION forming part of Letters Patent No. 485,584, dated November 1, 1892.

Application filed March 5, 1892. Serial No. 423,939. (No model.)

To all whom it may concern:

Be it known that I, JOHN B. MORGAN, of Middleborough, in the county of Plymouth and State of Massachusetts, have invented
5 new and useful Improvements in Tool-Heating Devices, of which the following is a specification.

This invention relates to an improved device for heating tools and appliances of a like
10 nature, whether stationary or in motion; and it is particularly adapted for heating boot and shoe edge setters. In the heating devices of this class now in use fire or flames produced by the combustion of gas, coal, and other fuel
15 are commonly employed. The use of heat produced by these methods is attended by more or less risk and considerable expense. By means of my improved device I am enabled to utilize steam, hot water, or other liquid, and
20 thus produce a heat which is not only economical, but safe.

The nature of the invention is fully described below, and illustrated in the accompanying drawings, in which—

25 Figure 1 is a view, partly in side elevation and partly in vertical section, of a portion of an edge-setting machine having my attachment applied thereto. Fig. 2 is a horizontal section on line *x*, Fig. 1.

30 Similar letters of reference indicate like parts.

A represents a portion of one of the burnishing-arms in an edge-setter constructed as usual. Rigidly secured to this portion A and
35 supported thereby are the vertical arms or hangers B, which support the horizontal guide-arms or frame C. This frame C is provided with cross-pieces C', whose function is to support the steam-pipes D D', the former of which is
40 a feed or inlet pipe and the latter an outlet-pipe leading back to the boiler or connecting with another reservoir similar to that below described. These pipes D D' connect by means of suitable ports with the reservoir E,
45 having a supporting extension E', through which the pipes pass before they reach the reservoir proper. The reservoir is provided with indentations F in its upper wall for the reception of the burnishing-tools below de-
50 scribed, such indentations being surrounded

by the steam in the reservoir, whereby the heat is applied to said tools, not only on their faces or under surfaces, but on their different sides. If desired, any or all the walls of this reservoir may be made double, as shown at *e*,
55 Fig. 1, whereby a space is provided between the inner and outer shells, which space may be furnished, if desired, with suitable packing or filling—such as asbestos—for retaining the degree of temperature in the reservoir. 60
As many of these indentations or chambers F may be provided as desired, and they may be used for the admission of tools in the manner above designated or as receptacles in which detached tools may be placed and heated. 65

A' is a frame depending from and supported by the arm A and sustaining the post H, which is adapted to reciprocate vertically therein.

I is a stationary sleeve or collar supporting
70 the heads J', which hold the burnishing-tools J, said tools being held in position by the springs *b*, whose upper ends are secured to the said heads.

K is a hub rigidly secured to the post H
75 and held normally down in the position shown by the spring *d*. A projection L extends horizontally from the hub K and is pivotally connected by a link L' with one end of the lever N, fulcrumed at *n* to the hanger or bracket P.
80 To the other end of the lever N is pivotally secured the connecting-bar R, whose lower end is pivotally secured to the part E'. A spiral spring S connects the part E' and the hanger P and holds the former normally in the posi-
85 tion shown. When the tool J being heated is to be removed from the indentation F in order to allow another to be swung around into it and heated, lifting the hub K causes the projection L and link L' to lift that end
90 of the lever N and depress the opposite end and by means of the connecting-bar R to lower the reservoir at the same time that the hub K rises, thus enabling them to be swung out of and into position without coming in contact
95 with the reservoir. Pins *g*, secured to opposite sides of the reservoir, play vertically in the grooves *h* in the hangers B and serve as guides as the reservoir is raised and lowered.

I do not limit myself to the exact style of 100

tools shown, as any tool or similar appliance may be substituted therefor; nor do I limit myself to the exact construction illustrated in its details.

5 Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a device for heating tools, the combination of the vertically-reciprocating heating-reservoir E, the shell of which is formed into
10 depressions or indentations for the reception of the tools to be heated, and the rotative tool-holder above described, whereby the heating-reservoir is raised into position to receive
15 the tools and the tools moved circularly into coincidence with the depressions in the reservoir, substantially as described.

2. In a device for heating tools, the combination of the arm A, provided with the vertical guide-arms or hanger B, frame C, supported by said hanger; heating-reservoir E,

provided with the indentations F and extension E'; lever N, pivotally suspended from the arm A, connecting-bar R, spring S, whereby the reservoir is held normally in a raised position, and a rotary tool-holder sustained by
25 said frame A', substantially as set forth.

3. The combination of the arm A, frame A', supported thereby, post H, reciprocating vertically therein and supporting a rotary tool-holder, hub K, rigid on said post and held
30 normally down by a spring, projection L, lever N, pivotally suspended from the arm A, link L', connecting said lever N and projection L, and a vertically-reciprocating heating-reservoir provided with indentations for the
35 reception of the tools supported by the rotary tool-holder, substantially as described.

JOHN B. MORGAN.

Witnesses:

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