

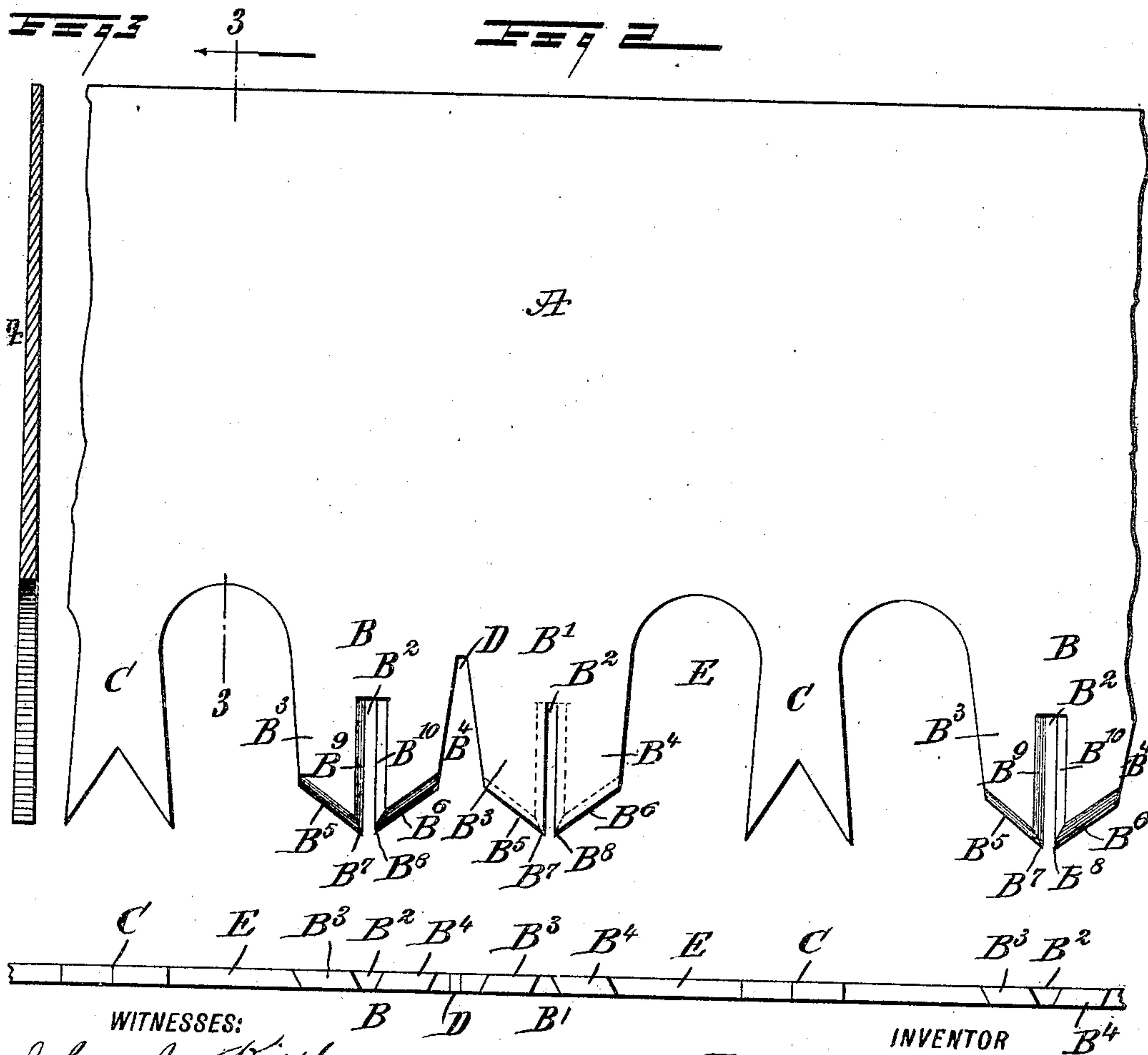
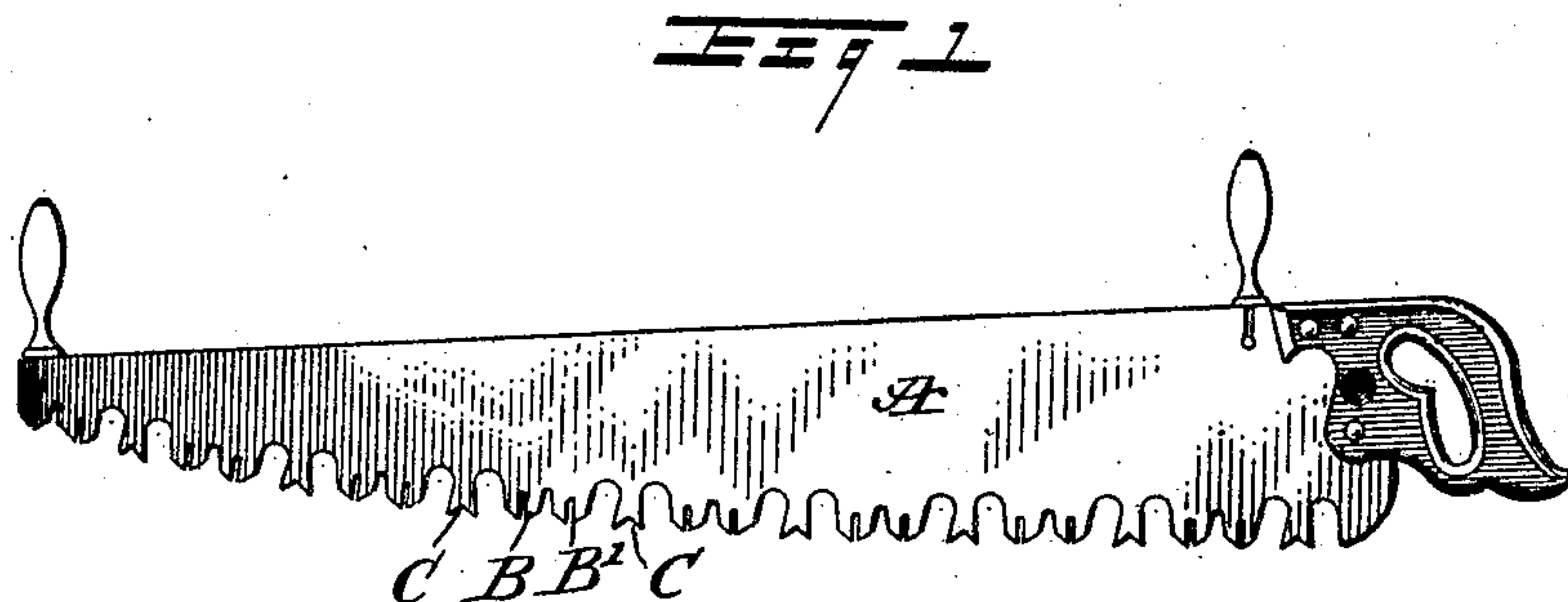
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PATENTED NOV. 13, 1906.

F. W. McINTOSH.

CROSSCUT SAW.

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WITNESSES:

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CROSSCUT-SAW.

No. 836,048.

Specification of Letters Patent.

Patented Nov. 13, 1906.

Application filed March 31, 1905. Serial No. 253,009.

To all whom it may concern:

Be it known that I, FREDERIC WINSOR McINTOSH, a citizen of the United States, and a resident of Montesano, in the county of Chehalis and State of Washington, have invented a new and Improved Crosscut-Saw, of which the following is a full, clear, and exact description.

The invention relates to crosscut-saws for use by one or two operators in cutting logs for timber, felling trees, &c.

The object of the invention is to provide a new and improved crosscut-saw arranged to provide sufficient clearance in the kerf for the saw-blade to pass easily through, to allow the cutting edges of the cutting-teeth to strike the wood at a more scientific angle for cutting without danger of becoming "timber bound" or likelihood of the tooth-points being broken off in resinous or knotty timber, to readily permit of sawing the timber without undue physical exertion on the part of the operator, and to provide a crosscut-saw which, for the reasons stated, will lessen the necessity for frequent filings to maintain the same in working order.

The invention consists of novel features and parts and combinations of the same, as will be more fully described hereinafter and then pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of the improvement. Fig. 2 is an enlarged face view of part of the saw-blade. Fig. 3 is a transverse section of the same on the line 3 3 of Fig. 2, and Fig. 4 is an inverted edge view of the same.

On the blade A of the crosscut-saw are formed pairs of cutting-teeth B B' alternating with raking-teeth C of usual construction. Each tooth B and B' of a pair of cutting-teeth is formed with a vertical slot B², extending from the point of the tooth upward to within a distance of the base of the tooth, so as to form a forward member B³ and a rearward member B⁴, at the same time giving the tooth a forked appearance. The cutting edges B⁵ and B⁶ of the forward and rearward cutting members are beveled and inclined upwardly from points B⁷ B⁸ in opposite directions—that is, the cutting edge B⁵ of the forward member B³ slants upwardly and

forwardly from its point B⁷, while the cutting edge B⁶ slants upwardly and rearwardly from its point B⁸. The backs B⁹ and B¹⁰ of the members B³ B⁴ are beveled on the same face as the cutting edges B⁵ and B⁶, it being understood by reference to Figs. 2 and 4 that the several bevels of the tooth B are on one face of the saw, while the bevels of the tooth B' are on the opposite face of the saw.

The cut-out portion D, separating the teeth B and B' of a pair of cutting-teeth from each other, is very narrow in comparison to the cut-out portion E between one of the cutting-teeth B or B' and the next following raking-tooth C, so that the pair of cutting-teeth B B' is rendered exceedingly strong and durable, and hence is not liable to break or become injured.

By the arrangement described the cutting-teeth B and B' practically form series of knives cutting into the timber in the direction of the movement of the saw, each tooth cutting its own proportional part of the timber, and the tooth is prevented from cutting more or deeper by the teeth on either side of it.

It will also be seen that by the arrangement described the cutting-teeth cut equally on both the forward and the backward stroke, the cut made by each tooth being a shearing cut, and the cuts made by the pair of teeth B B' define the width of the kerf.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A crosscut-saw having pairs of cutting-teeth, and raking-teeth alternating with the pairs of cutting-teeth, each tooth of each pair of cutting-teeth comprising forward and rearward members separated by a vertical slot the sides of which are beveled from one end to the other, the cutting edges of said forward and rearward members being also beveled, the several bevels being all on one face of one of the teeth of a pair and on the opposite face of the other tooth of said pair, the teeth of each pair of cutting-teeth being separated by a cut-out portion larger than the slot between the members of each tooth, and the pairs of said teeth being separated from the raking-teeth by cut-out portions of greater width than the first-mentioned cut-out portion.

2. A crosscut-saw having pairs of cutting-teeth, and raking-teeth alternating with the pairs of cutting-teeth, each tooth of each

pair of cutting-teeth comprising forward and rearward members separated by a vertical slot the sides of which are beveled from one end to the other, the cutting edges of said
5 forward and rearward members being also beveled and inclined upwardly in opposite directions from the points formed by the junction of said cutting edges and the beveled sides of the slots, the several bevels being
10 all on one face of the members constituting one of the teeth of a pair, and on the opposite face of the members forming the other tooth of said pair, the teeth of each pair of cutting-teeth being separated from each

other by a cut-out portion larger than the slot between the members of each tooth and having inwardly-tapering side edges, and the pairs of said teeth being separated from the raking-teeth by cut-out portions of greater width than the said first-named cut-out portion.
15 20

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FREDERIC WINSOR MCINTOSH.

Witnesses:

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