C. H. LUCAS.

LATHE CENTER.

APPLICATION FILED AUG. 11, 1908.

907,067. Patented Dec. 15, 1908.

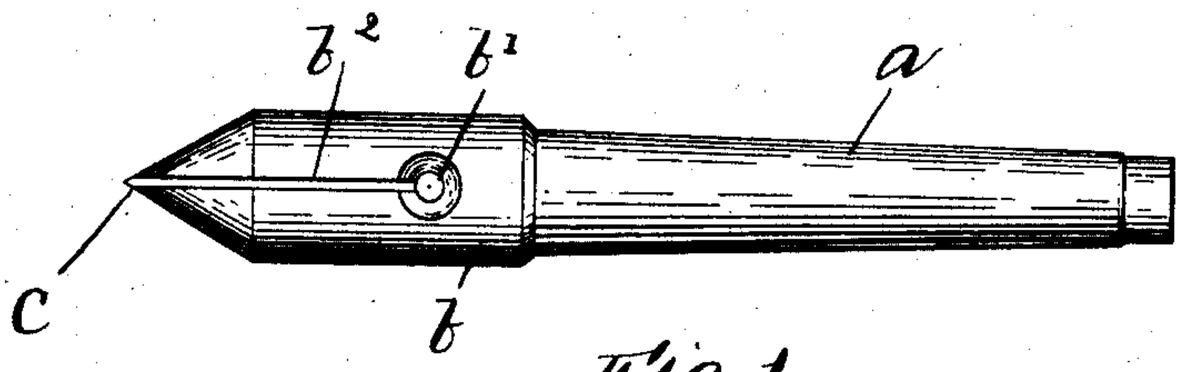

Fig. 1.

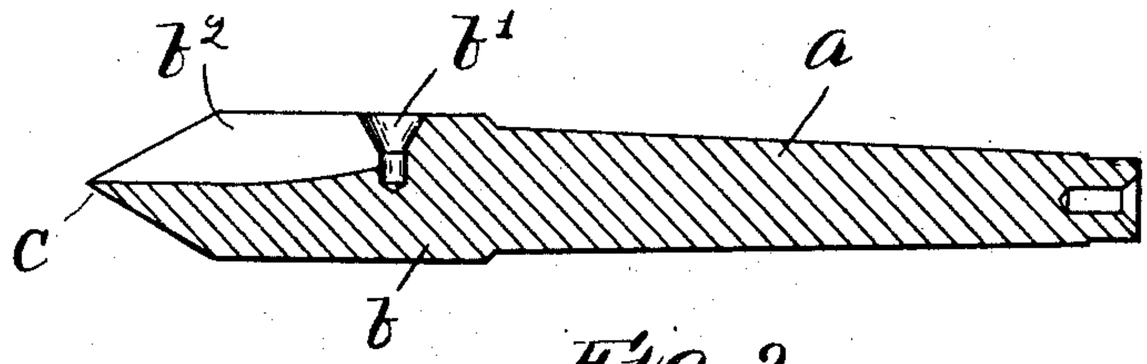

Fig. 2.

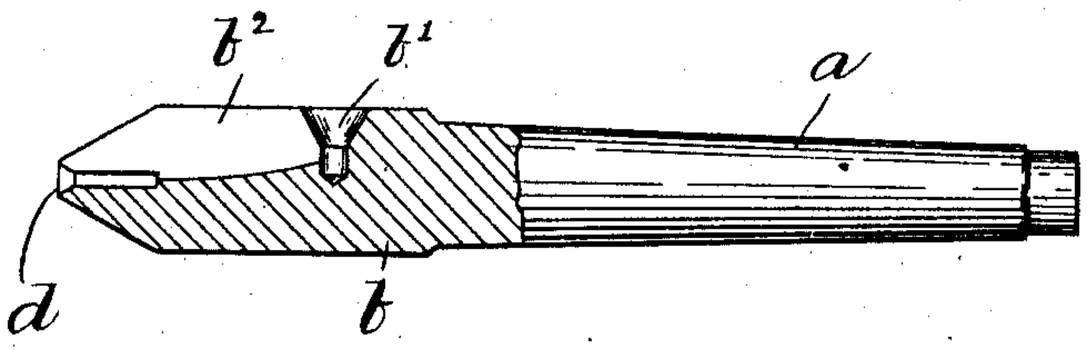

Fig. 3.

Witnesses:
H. B. Davis.
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UNITED STATES PATENT OFFICE.

CHARLES H. LUCAS, OF WALTHAM, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO JOHN H. STARK, OF WALTHAM, MASSACHUSETTS.

LATHE-CENTER.

No. 907,067. Specification of Letters Patent. Patented Dec. 15, 1908.

Application filed August 11, 1908. Serial No. 447,927.

To all whom it may concern:

Be it known that I, CHARLES H. LUCAS, of Waltham, county of Middlesex, State of Massachusetts, have invented an Improvement in Lathe-Centers, of which the following is a specification.

This invention relates to lathe-centers.

It has for its object to provide the lathe-center with an oil-conducting passage, arranged to conduct oil to the end or point thereof, which is so constructed or formed as not to alter the usual formation of the point or end of the lathe-center. The male lathe-center has a conical point and the female lathe-center has a conical socket at the end, and both forms of lathe-centers may be provided with an oil-conducting passage embodying my invention, without alteration or change in the formation of said point or end.

Figure 1 is a plan view of a male lathe-center provided with an oil-conducting passage embodying this invention. Fig. 2 is a longitudinal vertical section of the same. Fig. 3 is a longitudinal vertical section of a female lathe-center provided with an oil-conducting passage embodying this invention.

Referring to Figs. 1 and 2 *a* represents a tapering cylindrical shank and *b* a cylindrical body having a conical pointed end *c*. A socket *b'*, preferably tapering, is formed in the body *b*, which extends inward radially. It may be of any desirable depth, extending to or beyond the center of the body. A radial slot b^2 is formed in the side of the body, and its conical pointed end, which extends from the socket *b'* to the end or point of the lathe-center. It is made narrow, yet wide enough to permit the passage of oil. It is made of any desired depth, but preferably extends inward to or nearly to the center of the body. It is in open communication with the socket so that the oil contained in said socket may enter it. The socket, however, is extended a short distance below the bottom of the slot, so as to form a well at the bottom. To form the slot a circular cutter may be employed, and in such case the bottom of the slot, at the end adjacent the socket, is curved, so that the slot communicates only with the upper part of the socket. The radial slot thus formed, which extends longitudinally from the socket to the point, provides for the passage of oil to the point, but the formation of this slot does not alter the formation of the point, which it will be understood is still conserved.

Referring to Fig. 3 the conical end portion of the lathe-center is formed with a conical socket *d*, and the radial slot b^2 extends longitudinally from the socket *b'* to the end of the conical end portion, and is made of a depth to conduct the oil from the socket in the body to the socketed end *d*. In this instance the formation of the slot does not alter the formation of the socketed end *d*.

Conserving the shape of the point or end of the lathe-center is very important, and care is taken in the formation of the radial slot not to change the formation of the said point or end whatsoever.

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

1. A lathe-center having a cylindrical body formed with a conical pointed end, and a radial socket in its body and a slot in the side of said body and conical pointed end thereof, extending longitudinally from said socket to but not including the point of said conical pointed end, whereby a passage is provided for conducting oil to the point, which latter is still conserved, substantially as described.

2. A lathe-center having a radial socket in its body and a slot extending longitudinally from said socket to its end and extending radially to approximately its center, substantially as described.

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

CHARLES H. LUCAS.

Witnesses:

B. J. NOYES,

H. B. DAVIS.