

No. 771,614.

PATENTED OCT. 4, 1904.

J. W. DECKERT.  
CYLINDER FOR HIDE WORKING MACHINERY.

APPLICATION FILED JUNE 15, 1904.

NO MODEL.

2 SHEETS—SHEET 1.

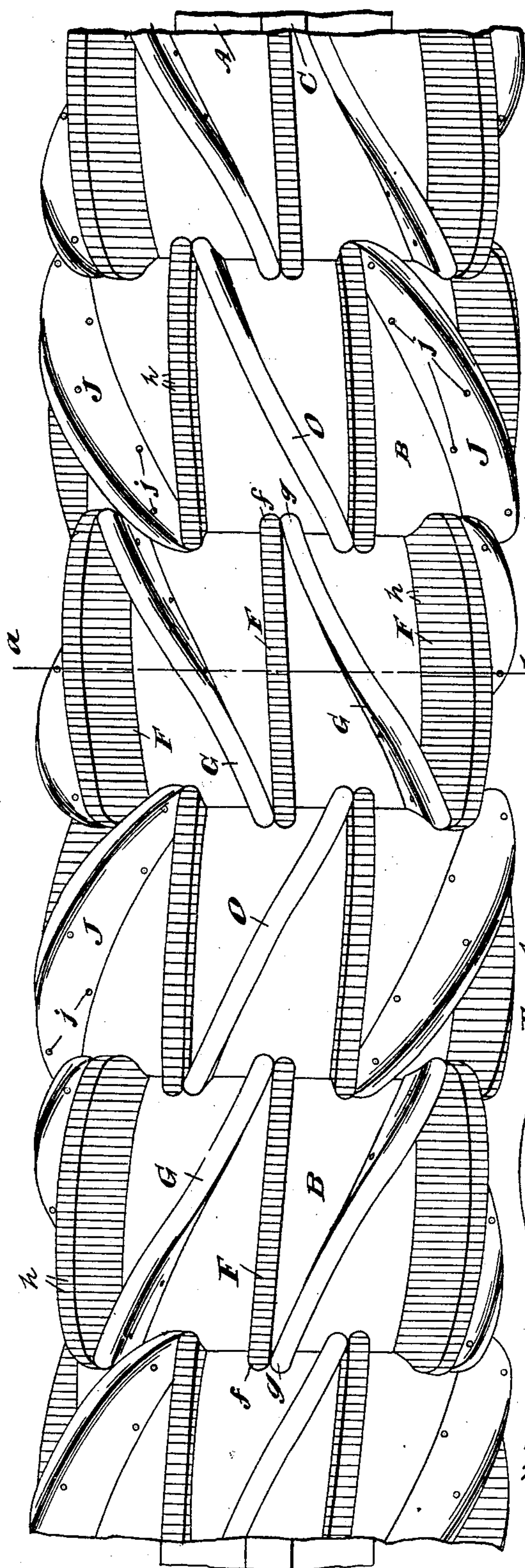


Fig. 2.

Fig. 3.

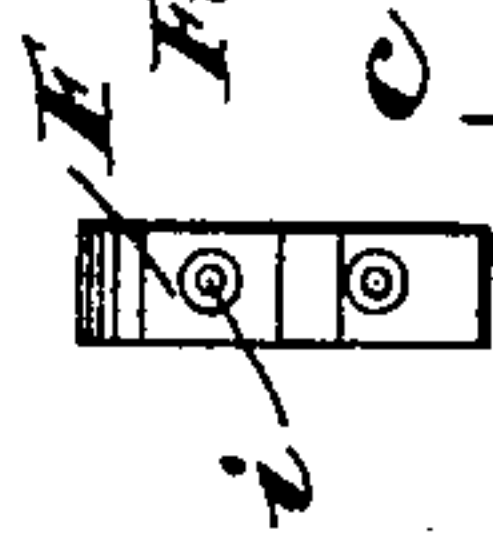


Fig. 4.

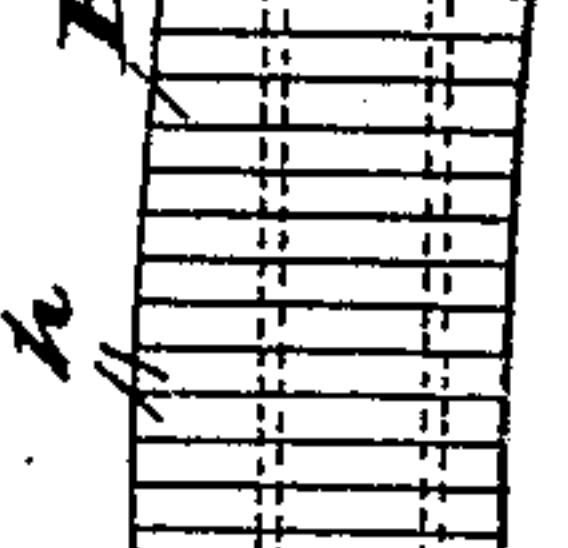


Fig. 5.



Fig. 6.



Fig. 7.

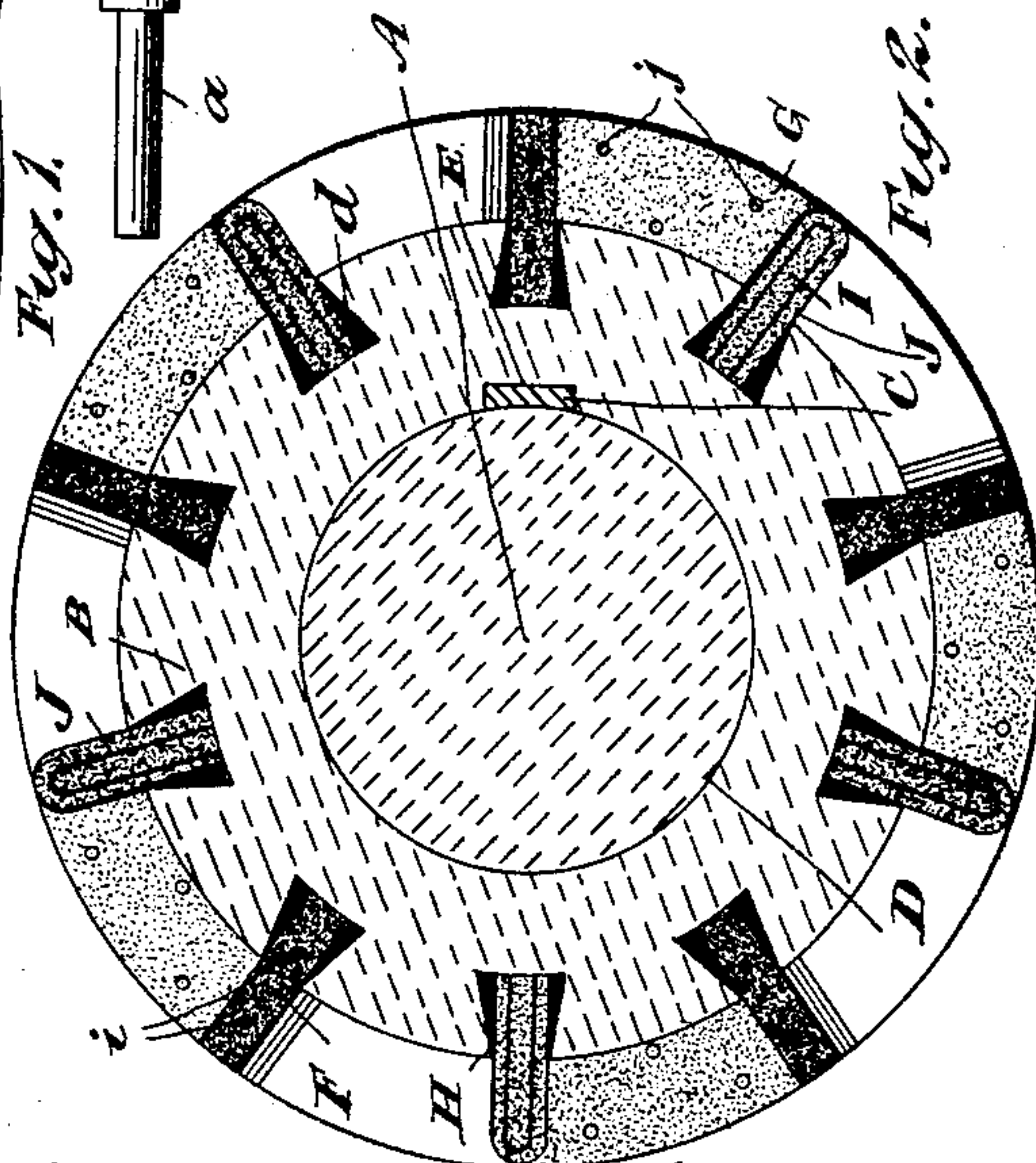


Fig. 8.

Witnesses.

Mr. Blackhall.

Ernest B. Buckle

Inventor.

J. W. Deckert.

By Egbert R. Case, atty.

No. 771,614.

PATENTED OCT. 4, 1904.

J. W. DECKERT.  
CYLINDER FOR HIDE WORKING MACHINERY.

APPLICATION FILED JUNE 15, 1904.

NO MODEL.

2 SHEETS—SHEET 2.

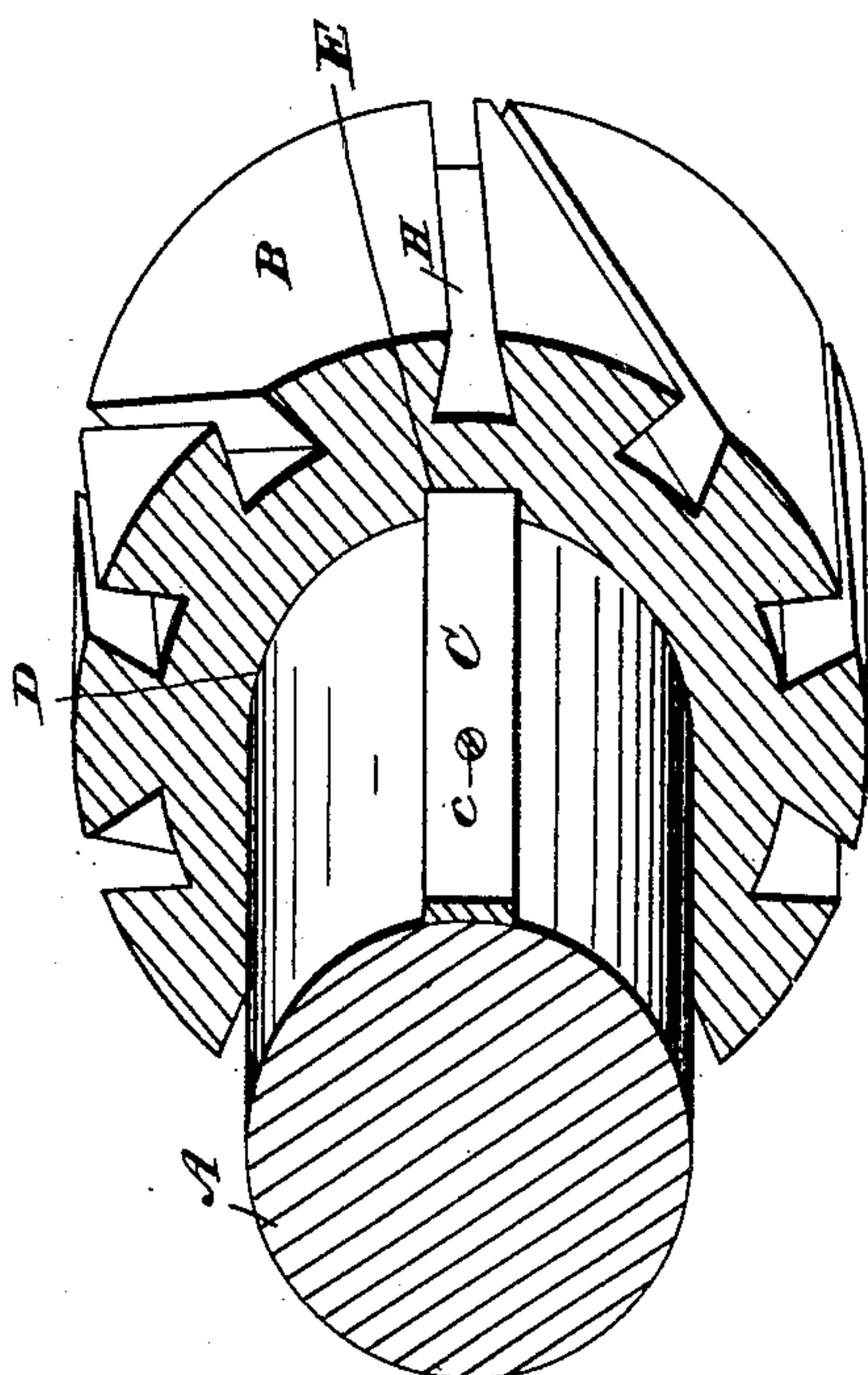


Fig. 8.

*Witnesses.*

*W. K. Blackhall*  
*James B. Buckle*

*Inventor:*

*J. W. Deckert.*  
*by Egerton R. Case.*  
*Atty.*



# UNITED STATES PATENT OFFICE.

JAMES WILLIAM DECKERT, OF OAKVILLE, CANADA.

## CYLINDER FOR HIDE-WORKING MACHINERY.

SPECIFICATION forming part of Letters Patent No. 771,614, dated October 4, 1904.

Application filed June 15, 1904. Serial No. 212,672. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES WILLIAM DECKERT, leather-splitter, a citizen of the United States, residing in the town of Oakville, in the county of Halton and Province of Ontario, Canada, have invented certain new and useful Improvements in Cylinders for Hide-Working Machinery, of which the following is a specification.

My invention relates to improvements in cylinders for hide-working machinery; and the objects of my invention are, first, to provide a substantially new cylinder for each of the different classes of work—such as unhairing, 5 unfleshing, setting, and working out hides and stoning out hides—without having to provide an entire new cylinder for these purposes; secondly, to permit of the speedy and easy renewal of any of the blades or stones that may be worn out or damaged; thirdly, to provide a particular construction of blades for unhairing purposes, and, fourthly, to situate 15 part of the blades so as to provide the right-hand half of the cylinder with working-out and setting-out spirals that work the hide to the right and to situate the rest of the blades as to provide the left-hand half of said cylinder with the same spirals that work the hide out to the left; and it broadly consists, essentially, of a permanent metal foundation, preferably a shaft, a plurality of sections or rings removably held thereon, and a plurality of blades or stones held in said sections or rings in such manner as to provide a slight working-out spiral and a pronounced setting-out spiral around the cylinder, as hereinafter more particularly explained.

My invention further consists in constructing the blades for unhairing purposes out of rawhide, as hereinafter more particularly explained.

Figure 1 is an enlarged side elevation of part of my cylinder, showing same provided with blades for unhairing purposes. Fig. 2 45 is a cross-section on the line *a b*, Fig. 1. Fig. 3 is a side elevation of one of the working-out blades, and Fig. 4 is an end elevation of same. Fig. 5 is a side elevation of one of the setting-out blades; and Fig. 6, a cross-section on

the line *c d*, Fig. 5. Fig. 7 is a reduced side elevation of the preferred form of shaft for the cylinder. Fig. 8 is a perspective view, partly in section, of part of the metal shaft and one of the sections or rings held therein, the blades being removed. 55

In the drawings like letters of reference indicate corresponding parts in each figure.

The cylinder hereinafter described I have designed particularly for unhairing purposes. As is usual, one half of my cylinder is provided with blades or stones set at an angle or angles which work the hide out to the right and the other half is provided with blades or stones set at the same angle or angles which work the hide out to the left. In my preferred form of construction I use two kinds of blades for each ring or section and secure same therein at different angles. By securing the working-out blades at an angle in each section or ring they make a slight working-out spiral 65 round the cylinder, and by securing the setting-out blades at an angle in each section or ring they make a pronounced setting-out spiral round the cylinder. As will be understood, the working-out and setting-out spirals in the right-hand half of the cylinder work the hide to the right and the same spirals in the left-hand half work the hide to the left. 75

A is the permanent metal foundation, preferably a shaft, and same is provided with ends *a*, designed to be held in any suitable journal-bearing. 80

B represents the sections or rings designed to be slid onto the shaft A. I do not confine myself to any construction for securing the said sections or rings on said shaft; but my preferred form of construction for this purpose consists of a key C, suitably secured to said shaft, as by screws *c*. Each section or ring is provided with a central opening D, preferably round, so as to fit the shaft A, and a keyway E, in which fits the key C. By this construction it will be understood that the said sections or rings may be easily slid on and off said cylinder and that same will necessarily rotate therewith. As before described, there are a number of these rings or sections held on said shaft, and each is pro- 95



vided with a plurality of blades or stones held at the required angle therein. I do not confine myself to any particular construction of blade or stone, nor do I confine myself to any particular way of securing same in said sections or rings. Neither do I confine myself to necessarily using sets of blades or stones in said sections or rings, as it will be clearly understood that, for instance in stoning out hides, same kind of stones may be used in the said rings and set at the same angle therein.

For the purpose of illustrating my invention I have shown two different kinds of blades that I prefer to use in unhairing hides. The working-out blades F are secured alternately in the sections or rings and at a slight angle therein, so as to provide a slight working-out spiral round the cylinder, and the intermediate setting-out blades G are secured in said sections or rings at an angle, so as to make a pronounced setting-out spiral round the cylinder. From this, and as before mentioned, it will be seen that by so placing the blades in said sections the working-out and the setting-out spirals in the right-hand half of the cylinder work the hide to the right and the same spirals in the left-hand half work the hide to the left. My preferred form of construction for securing the said blades in place is to provide the sections or rings with dovetailed grooves H and pack therein and around the incased part of said blades any suitable material, such as cement or lead *d*, as shown. The ends *f* of the working-out blades F preferably abut the ends *g* of the setting-out blades G. As will be clearly seen from the drawings, the ends *f* and *g* of said blades extend beyond the sides of the sections or rings, so that the said blades will overlap part of the path of movement of the blades in the adjacent sections or rings.

The working-out blades F are made of rawhide specially prepared and compressed, and consist of a number of pieces *h* of rawhide placed together, as shown, and riveted by rivets *i*. As will be seen from Figs. 1, 2, and 4, the working edge of said blades F is shown square. By constructing the said blades from rawhide I obtain a lasting edge and a decided grip on the hide, pulling the hair more readily than any blades heretofore designed for that purpose. These blades are also very effective on fine hair and for taking out dirt, grease, and lime. The setting-out blades G are also specially prepared and compressed. They consist of a central portion I, made of rawhide, over which is covered the outer portion J, also constructed of rawhide. By any suitable means, such as rivets *j*, the parts of the blade G are secured together. The working edges of the blades G are rounded, as shown at O, and has a very excellent effect in setting-out the hide.

As will be seen from the drawings, the pre-

ferred staggered positions of the blades F and G in each half of the cylinder essentially make the setting-out and working-out spirals have staggered sections.

I do not confine myself to the construction of the several parts nor to the exact positions of the blades, as changes may be made therein without departing from the spirit of my invention.

What I claim as my invention is—

1. A cylinder for hide-working machinery comprising a shaft; a plurality of sections or rings removably held thereon; a plurality of working-out blades or stones secured alternately in said sections or rings and at a slight angle therein so as to provide a slight working-out spiral around the cylinder, and a plurality of intermediate setting-out blades or stones secured in said sections or rings and at an angle therein so as to provide a pronounced setting-out spiral around the cylinder.

2. A cylinder for hide-working machinery comprising a shaft; a plurality of sections or rings removably held thereon; a plurality of working-out blades or stones secured alternately in said sections or rings and at a slight angle therein so as to provide a slight working-out spiral around the cylinder, and a plurality of intermediate setting-out blades or stones secured in said sections or rings and at an angle therein so as to provide a pronounced setting-out spiral around the cylinder, the ends of said blades or stones being rounded and projecting beyond the sides of said rings.

3. A cylinder for hide-working machinery comprising a shaft; a plurality of sections or rings removably held thereon; a plurality of working-out blades or stones secured alternately in said sections or rings and at a slight angle therein so as to provide a slight working-out spiral around the cylinder, and a plurality of intermediate setting-out blades or stones secured in said sections or rings and at an angle therein so as to provide a pronounced setting-out spiral around the cylinder, the ends of said blades or stones being rounded and projecting beyond the sides of said rings, and the adjacent ends abutting against each other.

4. A cylinder for unhairing machinery comprising a shaft; a plurality of sections or rings removably held thereon; a plurality of working-out rawhide blades secured alternately in said sections or rings and at a slight angle therein so as to provide a slight working-out spiral around the cylinder, and a plurality of intermediate setting-out rawhide blades secured in said sections or rings and at an angle therein so as to provide a pronounced setting-out spiral around the cylinder.

5. A cylinder for unhairing machinery comprising a shaft; a plurality of sections or rings removably held thereon; a plurality of working-out rawhide blades secured alternately in said sections or rings and at a slight angle



therein so as to provide a slight working-out spiral around the cylinder, and a plurality of intermediate setting-out rawhide blades secured in said sections or rings and at an angle therein so as to provide a pronounced setting-out spiral around the cylinder, the ends of said working-out blades being rounded and projecting beyond the sides of said rings.

6. A cylinder for unhairing machinery comprising a shaft; a plurality of sections or rings removably held thereon; a plurality of working-out rawhide blades secured alternately in said sections or rings and at a slight angle therein so as to provide a slight working-out spiral around the cylinder, and a plurality of intermediate setting-out rawhide blades secured in said sections or rings and at an angle therein so as to provide a pronounced setting-out spiral around the cylinder, the ends of said working-out blades being rounded and projecting beyond the sides of said rings, and the adjacent ends abutting against each other.

7. A cylinder for unhairing machinery comprising a shaft; a plurality of sections or rings removably held thereon; a plurality of working-out blades made of a plurality of pieces of rawhide, the working edge of said working-out blades being square; means for securing said plurality of pieces together, these said working-out blades being secured alternately in said sections or rings and at a slight angle therein so as to provide a slight working-out spiral around the cylinder; a plurality of intermediate setting-out blades comprising a central portion made of rawhide, and an outer portion also made of rawhide wrapped around said inner portion and suitably secured thereto; the working edge of said setting-out blades being rounded, these said intermediate setting-out blades being secured in said sections or rings and at an angle therein so as to provide a pronounced setting-out spiral around the cylinder.

8. A cylinder for unhairing machinery comprising a shaft; a plurality of sections or rings removably held thereon; a plurality of working-out blades made of a plurality of pieces of rawhide, the working edge of said working-out blades being square; means for securing said plurality of pieces together, these said working-out blades being secured alternately in said sections or rings and at a slight angle therein so as to provide a slight working-out spiral around the cylinder; a plurality of intermediate setting-out blades comprising a central portion made of rawhide, and an outer portion also made of rawhide wrapped around said inner portion and suitably secured thereto; the working edge of said setting-out blades being rounded, these said intermediate setting-out blades being secured in said sections or rings and at an angle therein so as to provide a pronounced setting-out spiral around the cylinder, the ends of said working-out blades

and said setting-out blades being rounded and projecting beyond the sides of said rings.

9. A cylinder for unhairing machinery comprising a shaft; a plurality of sections or rings removably held thereon; a plurality of working-out blades made of a plurality of pieces of rawhide, the working edge of said working-out blades being square; means for securing said plurality of pieces together, these said working-out blades being secured alternately in said sections or rings and at a slight angle therein so as to provide a slight working-out spiral around the cylinder; a plurality of intermediate setting-out blades comprising a central portion made of rawhide, and an outer portion also made of rawhide wrapped around said inner portion and suitably secured thereto; the working edge of said setting-out blades being rounded, these said intermediate setting-out blades being secured in said sections or rings and at an angle therein so as to provide a pronounced setting-out spiral around the cylinder, the ends of said working-out and setting-out blades being rounded and projecting beyond the sides of said rings, and the adjacent ends abutting against each other.

10. A cylinder for unhairing machinery comprising a shaft; a first plurality of sections or rings removably held thereon forming the right-hand half of said cylinder; a first plurality of working-out blades made of a plurality of pieces of rawhide; the working edge of said working-out blades being square; means for securing said plurality of pieces together, these first plurality of said working-out blades being secured alternately in said first plurality of sections or rings and at a slight angle therein so as to provide a slight working-out spiral around the right-hand half of said cylinder; a first plurality of intermediate setting-out blades comprising a central portion made of rawhide, and an outer portion also made of rawhide wrapped around said inner portion and suitably secured thereto; the working edge of the first plurality of said setting-out blades being rounded, these first plurality of said intermediate setting-out blades being secured in said first plurality of sections or rings and at an angle therein so as to provide a pronounced setting-out spiral around the right-hand half of said cylinder, the ends of said first plurality of working-out and setting-out blades being rounded and projecting beyond the sides of said first plurality of sections or rings and the adjacent ends abutting against each other; a second plurality of sections or rings removably held on said shaft forming the left-hand half of said cylinder; a second plurality of working-out blades made of a plurality of pieces of rawhide; the working edge of said working-out blades being square; means for securing said plurality of pieces together, these second plurality of said working-out blades being secured alter-



nately in said second plurality of sections or rings and at a slight angle therein so as to provide a slight working-out spiral around the left-hand half of said cylinder; a second  
5 plurality of intermediate setting-out blades comprising a central portion made of rawhide, and an outer portion also made of rawhide wrapped around said inner portion and suitably secured thereto; the working edge of the  
10 second plurality of said setting-out blades being rounded, these second plurality of intermediate setting-out blades being secured in said second plurality of sections or rings and at an angle therein so as to provide a pro-  
15 nounced setting-out spiral around the left-hand half of said cylinder, the ends of said second plurality of working-out and setting-out blades being rounded and projecting beyond the sides of said second plurality of sections or rings and the adjacent ends abutting  
20 against each other.

11. A blade for hide-working machinery constructed of rawhide.

12. A working-out blade for hide-working  
25 machinery comprising a plurality of pieces of rawhide placed together, and rivets fastened therethrough so as to secure them together.

13. A working-out blade for hide-working machinery comprising a plurality of pieces of  
30 rawhide placed together, and rivets fastened therethrough so as to secure them together, the working edge of said blade being square.

14. A setting-out blade for hide-working machinery comprising a center portion made  
35 of rawhide and an outer portion suitably secured therearound.

15. A setting-out blade for hide-working machinery comprising a center portion made

of rawhide and an outer portion suitably secured therearound, the working edge of said  
40 blade being rounded.

16. A cylinder for hide-working machinery comprising a shaft; a first plurality of sections or rings removably held thereon forming the  
45 right-hand half of said cylinder; a first plurality of working-out blades or stones secured alternately in said first plurality of sections or rings and at a slight angle therein so as to provide a slight working-out spiral around the  
50 right-hand half of said cylinder; a first plurality of intermediate setting-out blades or stones secured in said first plurality of sections or rings and at an angle therein so as to provide a pronounced setting-out spiral around the right-hand half of said cylinder; 55  
a second plurality of sections or rings removably held thereon forming the left-hand half of said cylinder; a second plurality of working-out blades or stones secured alternately  
60 in said second plurality of sections or rings and at a slight angle therein so as to provide a slight working-out spiral around the left-hand half of said cylinder; a second plurality of intermediate setting-out blades or stones  
65 secured in said second plurality of sections or rings and at an angle therein so as to provide a pronounced setting-out spiral around the left-hand half of said cylinder.

In testimony whereof I have signed my name to this specification in the presence of two sub-  
70 scribing witnesses.

JAMES WILLIAM DECKERT.

Witnesses:

EGERTON R. CASE,  
WILMOT R. BLACKHALL.