

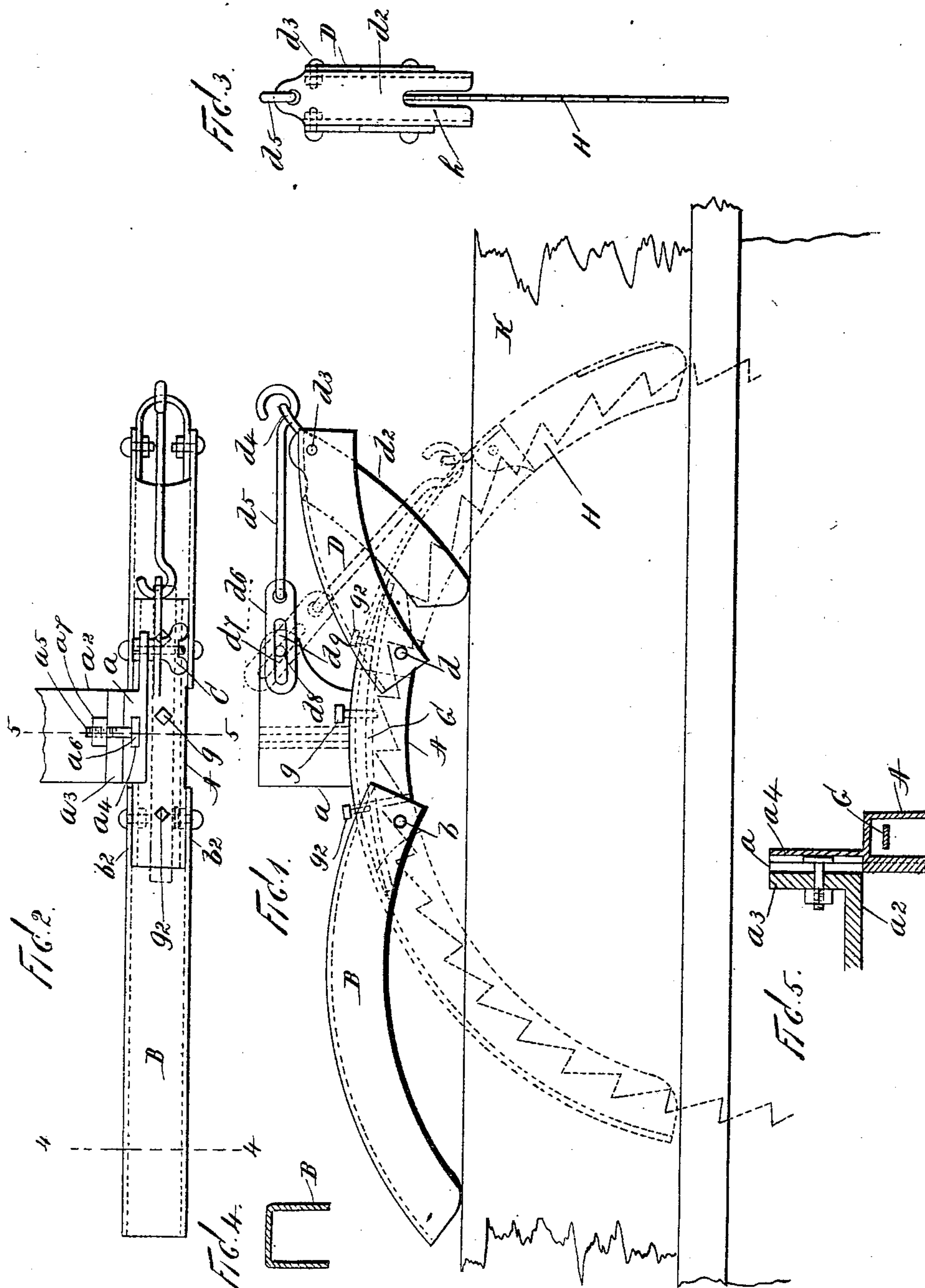
No. 625,310.

Patented May 23, 1899.

J. ANDERSON.
GUARD FOR CIRCULAR SAWS.

(Application filed Sept. 14, 1898.)

(No Model.)



WITNESS

John Buckler,
C. C. Olsen.

INVENTOR

John Anderson
BY
Edgar Sales & Co.
ATTORNEYS

UNITED STATES PATENT OFFICE.

JOHN ANDERSON, OF NEWCASTLE-UPON-TYNE, ENGLAND.

GUARD FOR CIRCULAR SAWS.

SPECIFICATION forming part of Letters Patent No. 625,310, dated May 23, 1899.

Application filed September 14, 1898. Serial No. 690,906. (No model.)

To all whom it may concern:

Be it known that I, JOHN ANDERSON, a subject of the Queen of Great Britain, residing at Newcastle-upon-Tyne, in the county of Northumberland, England, have invented certain new and useful Improvements in Guards for Circular Saws, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to guards for circular saws; and the object thereof is to provide an improved device of this class which is simple in construction and operation; and with this and other objects in view the invention consists in the construction, combination, and arrangement of parts hereinafter described and claimed.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which—

Figure 1 is a side elevation showing the construction and operation of my improved circular-saw guard; Fig. 2, a view of the guard; Fig. 3, a view of one end thereof; Fig. 4, a section on the line 4 4 of Fig. 2, and Fig. 5 a section on the line 5 5 of Fig. 2.

In the drawings forming part of this specification the separate parts of my improvement are designated by the same letters of reference in each of the views, and in the practice of my invention I provide a guard for circular saws which consists of a central holder, to each end of which is pivotally secured a shield, said shields when suspended forming a half-circle over the periphery of the saw.

The front shield is composed of two parts hinged together or pivotally connected, so that when the material to be operated upon is pushed up against the shield the lower or end portion thereof doubles back and raises that part of the guard with which it is connected, so as to allow the material to be operated upon by the saw to pass thereunder, and when the material is cleared said parts of the shield fall back into place and cover the saw.

In the drawings forming part of this specification, A represents the central part or holder of my improved saw-guard, and said central part or holder is trough-shaped in cross-section,

the open space therein being directed downwardly, and said part is provided with an upwardly-directed projection a , by means of which a bracket or other support a^2 is connected therewith. The bracket or support a^2 is provided with an upwardly-directed extension a^3 , and the holder is preferably connected therewith by forming a vertical groove a^4 in the upwardly-directed extension a , and a screw-threaded bolt a^5 is provided, with a head a^6 , which enters the groove a^4 and which passes through the upwardly-directed extension a^3 of the bracket a^2 and is provided with a nut a^7 . By means of this construction the central holder a^4 may be vertically adjusted, and any other suitable means may be employed for suspending said central holder, my invention being not limited to this feature of the construction.

The central holder A protects the upper portion of the saw, as will be readily understood, and is suspended directly thereover, and the movable parts of my improved saw-guard consist of two pivoted sections B and D, each of which is trough-shaped in cross-section, the open spaces therein being directed downwardly, and each of these parts and the central holder A are segmental in form.

The part B is pivotally connected with the holder A at b , and the part D is connected with the said holder at d , and the back portion of the part B is cut out to form side jaws b^2 , by means of which the pivotal connection with the central holder A is made, and said part B is free to swing vertically on said central holder.

The part D of the guard is composed of two parts of substantially equal length, one of said parts being designated by the reference-letter d^2 , and these parts are pivotally connected at d^3 , and the part d^2 is slightly narrower in cross-section than the part with which it is connected and is free to swing therein. The upper end of the part d^2 is provided with a projection d^4 , with which is pivotally connected a rod d^5 , which is pivotally connected with a plate d^6 , which is connected with the upwardly-directed extension a of the central holder, as shown at d^7 , said upwardly-directed extension being provided with a pin d^8 , which passes through a slot d^9 in the plate d^6 and on which is mounted a thumb-nut C,

by means of which the plate d^6 may be horizontally-adjusted, so as to lengthen or shorten the rod d^5 .

Mounted in the central holder A and longitudinally thereof is a spring-plate G, (shown in full lines in Fig. 5 and in dotted lines in Figs. 1 and 2,) and the ends of this spring-plate project outwardly through the open ends of the central holder A, and passing through the top of the central holder is a screw g , which also passes through the spring-plate G, and adjacent to each end of said central holder are screws g^2 , which pass through the top of said holder and bear on said spring-plate G, near the opposite ends thereof.

The spring-plate G is designed to raise or lower the free ends of the parts B and D of the guard, and this object may be accomplished by means of the screws g^2 , as will be readily understood.

I have also shown in Figs. 1 and 3 a part of a saw which is designated by the reference-letter H, and the portion d^2 of the part D of the guard is provided with a slot or opening h in the back thereof, through which the saw is adapted to pass when said portion d of the guard is raised into the position shown in full lines in Fig. 1.

A stick of timber is also shown in Fig. 2 and designated by the reference-letter K, and by means of which the position of the separate parts of the guard when the saw is in operation is illustrated.

My improved saw-guard may be composed of any desired material, and when the said device is not in use it assumes the position shown in dotted lines in Fig. 2 and covers and protects the upper portion of the saw, and when a piece of timber is passing thereunder and being operated upon by the saw the separate parts of the guard are raised into the position shown in full lines in Fig. 1, the hinged portion d^2 of the part D of the guard being folded upwardly and inwardly, and in this position of said parts the saw H passes through the slot or opening h in said portion d^2 of the guard. It will thus be seen that the parts B and D, the latter of which is composed of two parts pivotally connected or hinged together, constitute shields which, together with the central portion A, completely cover the upper portion of the saw when in use and the upper portion and sides thereof when the saw is not in use, and when the saw is not in use the pivoted parts of the guard are held in a semicircular position, so as to cover the teeth of the saw and not rest thereon. This position of the part D is secured by one of the screws g^2 and the projecting end of the plate G, and the part D, of which the part d^2 forms a portion, is held in proper relative position by means of the rod d^5 and the corresponding

end of the plate G and the screw g^2 , which bears thereon.

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

1. In a guard for circular saws, the combination with a central part A, of parts or shields B and D, said parts being each trough-shaped on their under side and segmental in form, and said part or shield D being composed of two parts which are pivotally connected and adapted to swing vertically, and the parts B and D being detachable, substantially as shown and described.

2. In a guard for circular saws, the combination with a central part A, of parts or shields B and D, said parts being trough-shaped on their under sides, the part or shield D being composed of two parts which are pivotally connected, each of said parts being also segmental in form, and that portion of the part D which is pivotally connected therewith being provided with a projection, and a rod which is pivotally connected therewith and horizontally adjustable, substantially as shown and described.

3. A guard for circular saws, consisting of a suitable support, a central portion connected therewith, which is segmental in form and trough-shaped in cross-section, two supplemental parts or shields pivotally connected with said central portion, each of which is segmental in form and trough-shaped in cross-section, and means for adjusting said supplemental parts or shields, one of said supplemental parts or shields being also composed of two parts which are pivotally connected or hinged together, and which are adapted to swing in a vertical plane, substantially as shown and described.

4. A guard for circular saws, consisting of a suitably-supported central portion which is trough-shaped in cross-section on its under side, two supplemental parts or shields pivotally connected with said central portion and of similar form in cross-section, each of said parts being segmental in form, and one of said supplemental parts or shields being composed of two parts which are pivotally connected and adapted to swing one within the other, and means for adjusting each of said supplemental parts or shields, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 24th day of August, 1898.

JOHN ANDERSON.

Witnesses:

HETHERINGTON NIXON,
FREDERICK DIXON NIXON.