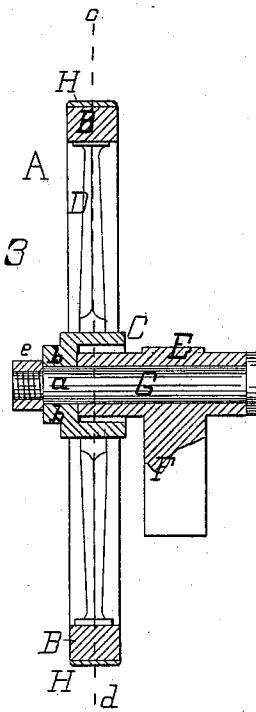
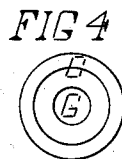
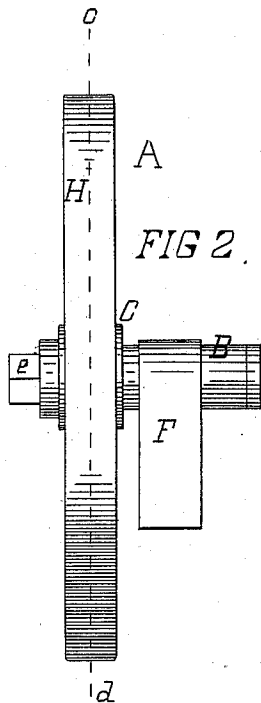
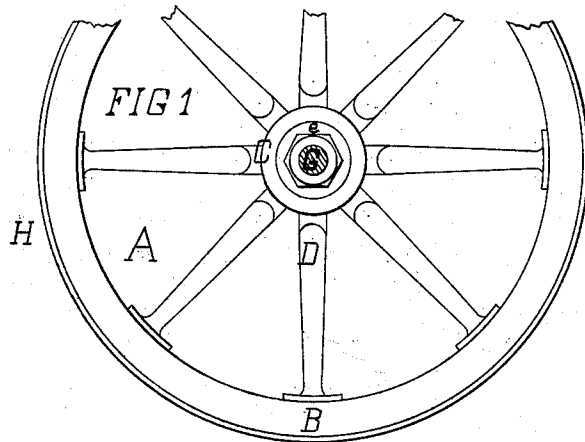


F. GLEASON.
Band-Saw Wheel.

No. 165,323.

Patented July 6, 1875.



WITNESSES
Chas. F. Haworth
Wm. C. Mendenhall

INVENTOR
Franklin Gleason
by Francis D. Easton
Atty

UNITED STATES PATENT OFFICE.

FRANKLIN GLEASON, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN BAND-SAW WHEELS.

Specification forming part of Letters Patent No. **165,323**, dated July 6, 1875; application filed March 16, 1875.

To all whom it may concern :

Be it known that I, FRANKLIN GLEASON, of Philadelphia, Pennsylvania, have invented an Improved Band-Saw Wheel, of which the following is a specification :

The invention consists in making the rim of a band-saw wheel of compressed paper-pulp. It also consists in the combination of a compressed paper-pulp rim, a hollow hub, and solid wood or metal arms.

Figure 1 is a side view; Fig. 2, an edge view; Fig. 3, a transverse diametrical section; Fig. 4, an end view of the hub.

A is a band-saw wheel, the rim B of which is of compressed paper, or of any of the pulps used for making paper. C is a hollow hub, connected to the rim B by the spokes D, which can be either of wood or metal, as the case may require. E is a bearing, which is secured to the band-saw machine by the hanger F. G is a shaft, which turns in the bearing E. Its outer end *a* fits snugly the portion *b* of the hub C, which projects beyond the vertical plane *c d* of the rim and the band-saw. A nut, *e*, secures the hub to the shaft G, to cause them to turn together. The paper or pulp is pressed in a mold of the exact shape of the rim, which prepares it ready for use without any subsequent

finishing other than sandpapering or some slight touching up to remove any roughness. A rim of compressed paper, or of paper-pulp, is not affected by atmospheric changes, which in other materials causes expansion or contraction, and the consequent warping and twisting of the rim. It makes a lighter and more economical wheel. A saw-bed, H, of gum or other material can be put on the rim after the wheel has been finished. By placing the point of suspension of a band-saw wheel beyond the vertical plane of the saw the tendency of the shaft to sag and bend is greatly lessened, the wear of the journal is equalized, and the true running of the wheel insured.

I claim as my invention—

1. In a band-saw wheel, the rim B of compressed paper-pulp, substantially as described.
2. In a band-saw wheel, the combination of the rim, solid arms, and a hollow hub, as shown and described.

In testimony whereof I hereunto sign my name in presence of two subscribing witnesses.

FRANKLIN GLEASON.

Witnesses:

JOHN PALMER,
FRANCIS D. PASTORIUS.