

W. W. GOULD.
SEWING MACHINE FLY WHEEL.
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898,639.

Patented Sept. 15, 1908.

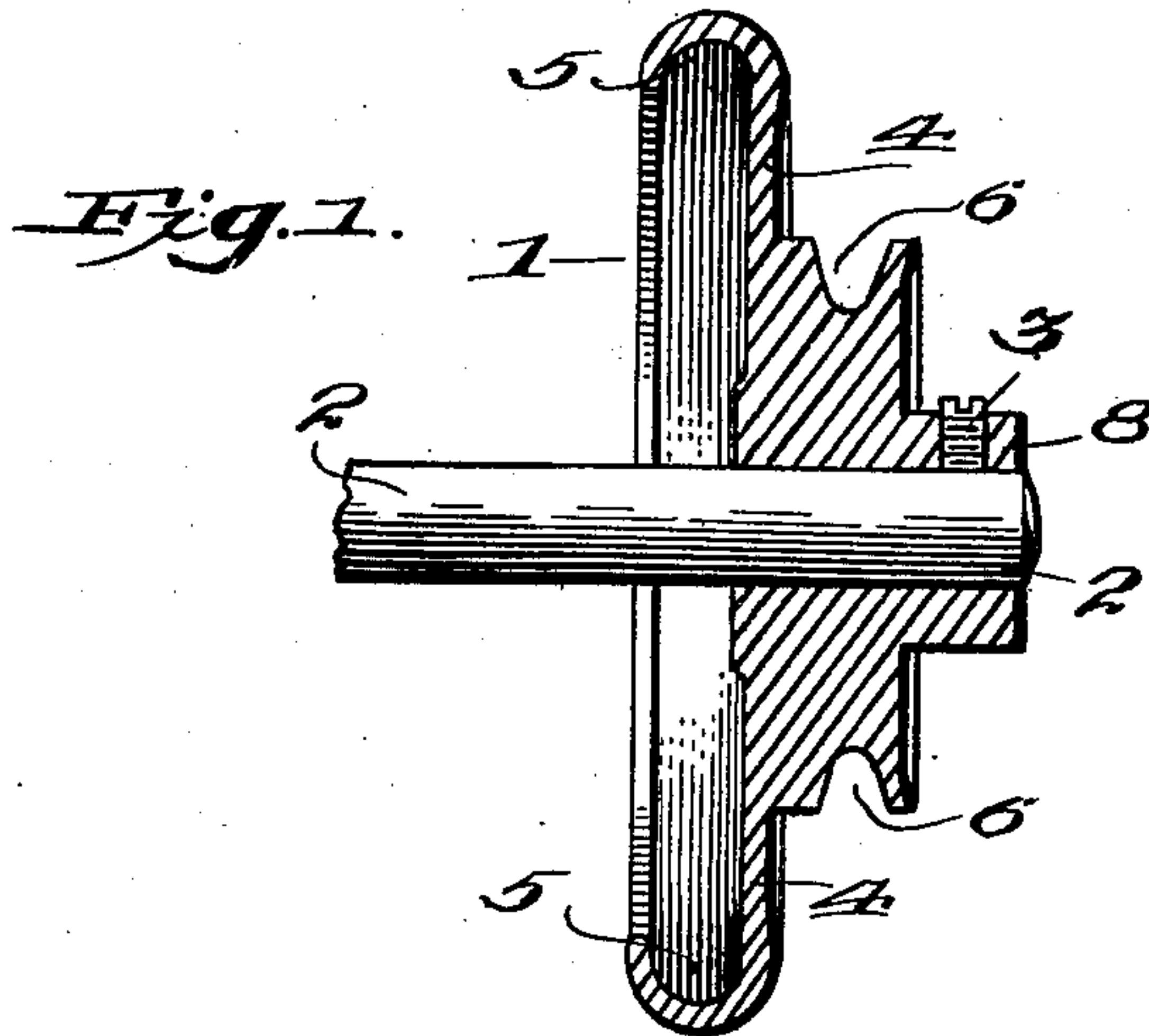
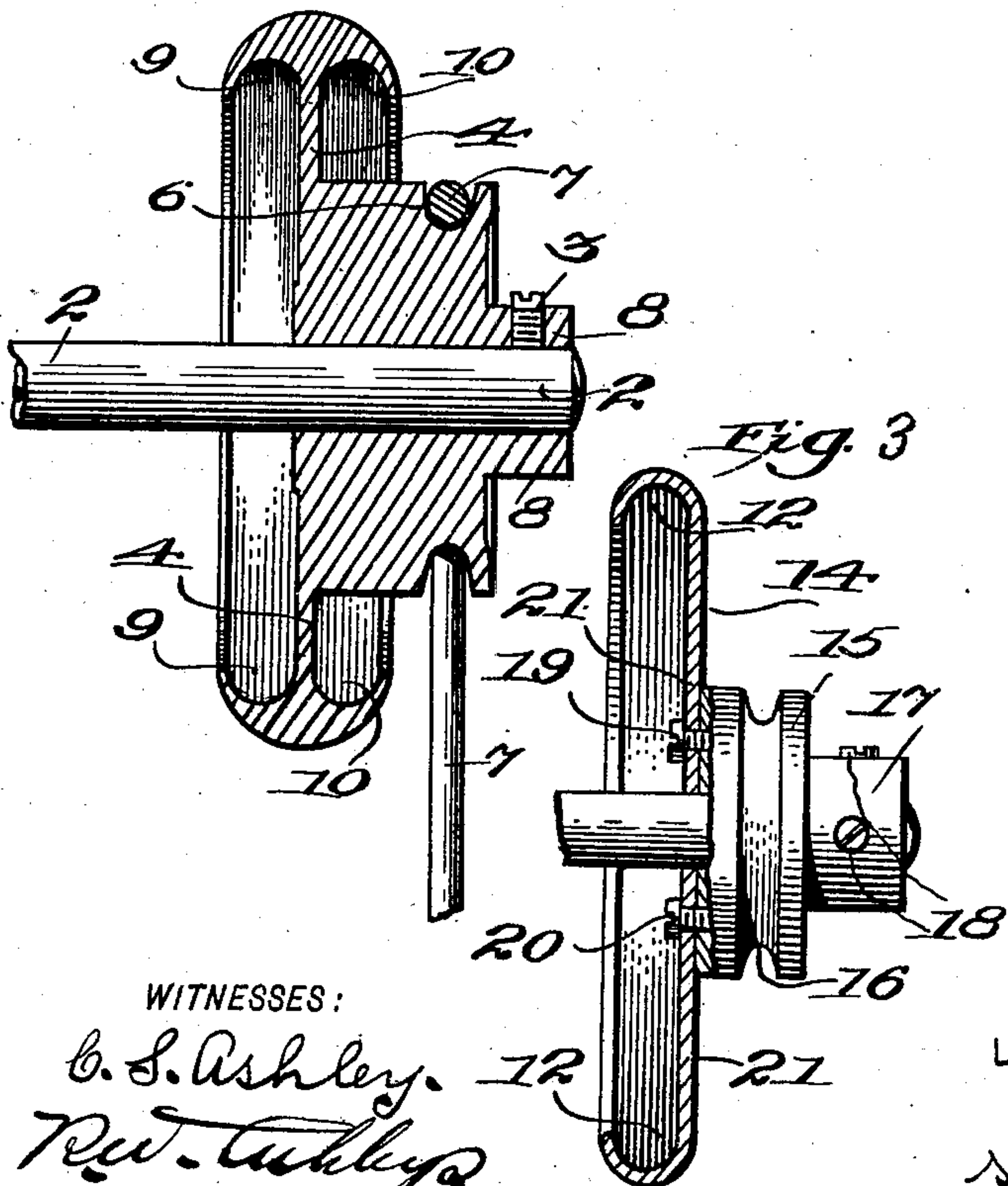


Fig. 2.



WITNESSES:

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SEWING-MACHINE FLY-WHEEL.

No. 898,639.

Specification of Letters Patent.

Patented Sept. 15, 1908.

Application filed February 24, 1906. Serial No. 302,690.

To all whom it may concern:

Be it known that I, WALLACE W. GOULD, a citizen of the United States, residing in the city of Bridgeport, county of Fairfield, State of Connecticut, have invented certain new and useful Improvements in Sewing-Machine Fly-Wheels, of which the following is a specification.

My invention relates to improvements in sewing machine fly wheels, and has for its object to provide means for preventing the throwing off of oil and grit therefrom while in motion.

Heretofore wheels of the character described, have been of great trouble to the user and operator in that the oil used on the mechanical parts of said machine would work itself along the drive shaft onto the balance or fly wheel and be thrown thereoff by centrifugal force onto the work, consequently ruining the garment or fabric operated upon.

In the following I have described in connection with the accompanying drawings, several forms of my invention, the features thereof being more particularly pointed out hereinafter in the claims.

In the drawings Figure 1 is a vertical sectional view illustrating the preferred form of my invention; Fig. 2 is a vertical sectional view of a modified form of construction; Fig. 3 is another modified form of construction illustrating my invention as applied to a fly wheel made of a plurality of parts.

Similar numerals of reference indicate similar parts throughout the several views.

1 indicates a balance or fly wheel as applied to a sewing machine shaft 2 and adapted to be fastened thereto by set screws 3, 3.

The wheel as illustrated in Fig. 1 is made of a solid casting, the web portion 4 thereof being turned down on its outer edges forming a rim cup 5 thereon. The wheel as applied to a sewing machine to be used thereon as a balance wheel and a drive for same, is mounted directly on the main drive shaft 2, as shown in Figs. 1 and 2 having the open side or cup side of the wheel towards the bearing of the shaft and has formed on the outer portion of the casting a groove 6 adapted to receive a driving strap 7, said outer portion having at its extreme outer end a hub bearing 8 in which set screws 3, 3 are mounted. The wheel is preferably mounted on said drive shaft so that the hub bearing 8 is flush with

the end of the shaft, as shown in Figs. 1, 2 and 4.

Fig. 2 is a modified form of construction illustrating my invention as applied to the balance or drive wheel of a sewing machine in which two rimmed cups may be employed, said cups comprising turned down rim portions 9 and 10 on both sides of the web 4 thereof.

Fig. 3 illustrates a modified form of my invention in which the fly wheel is made of two parts, the rimmed cup portion 14 forming one part and the projecting casting 15 forming the other part, casting 15 has a strap groove 16 formed therein, and carries a bearing portion 17 in which set screws 18 are mounted at its outer end, the respective parts thereof being held together by means of screws 19 and 20 passing through the web 21 of the wheel. It is obvious that said rimmed cup may be formed on both sides of a fly wheel, and that the oil collecting on said fly wheel while in motion will run down the spokes or web into said rimmed cup and be retained therein until the motion of said fly wheel is stopped when it may be removed.

Having described my invention what I claim and desire to secure by Letters Patent of the United States is:—

1. A cup shaped fly wheel for sewing machines having an inwardly turned rim adapted to form a channel around the inside the edge of the wheel, the open or cup side of the wheel being towards the bearing of the shaft and said wheel being mounted directly on the shaft so that the oil from the shaft can spread along the closed side of the wheel into said rim.

2. A combined pulley and fly wheel for sewing machines comprising a pulley section and an integral fly wheel section, the latter having an open cup faced surface on the side towards the bearing of the shaft and an inwardly turned rim adapted to form a channel around the inside the edge of the wheel, the flat side of the cup being in direct contact with the shaft so that the oil from the shaft passes along said flat side to said rim.

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

WALLACE W. GOULD.

Witnesses:

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J. ELTING DEYO.