

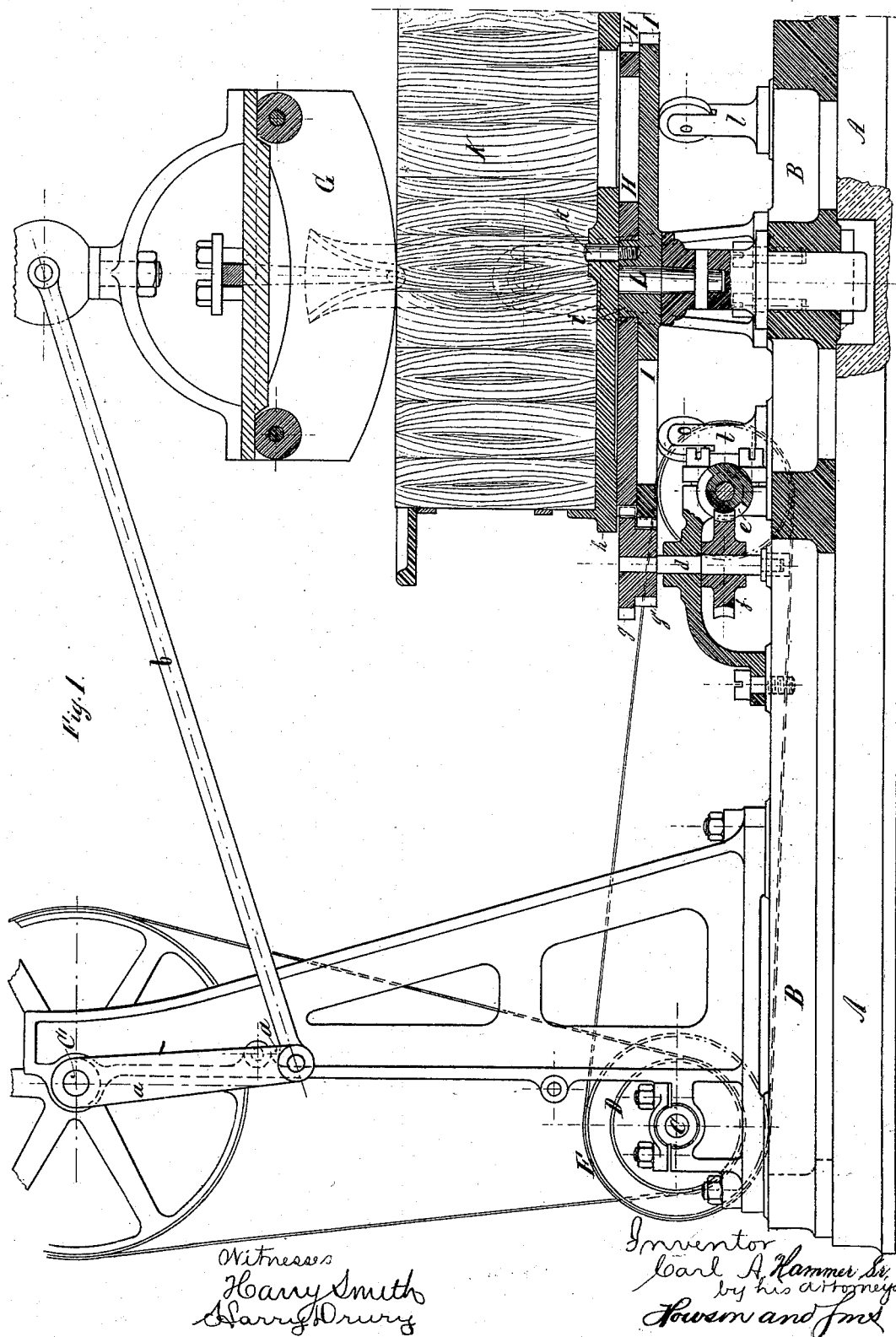
(No Model.)

2 Sheets—Sheet 1.

C. A. HAMMER, Sr.
MEAT MINCING APPARATUS.

No. 262,893.

Patented Aug. 15, 1882.



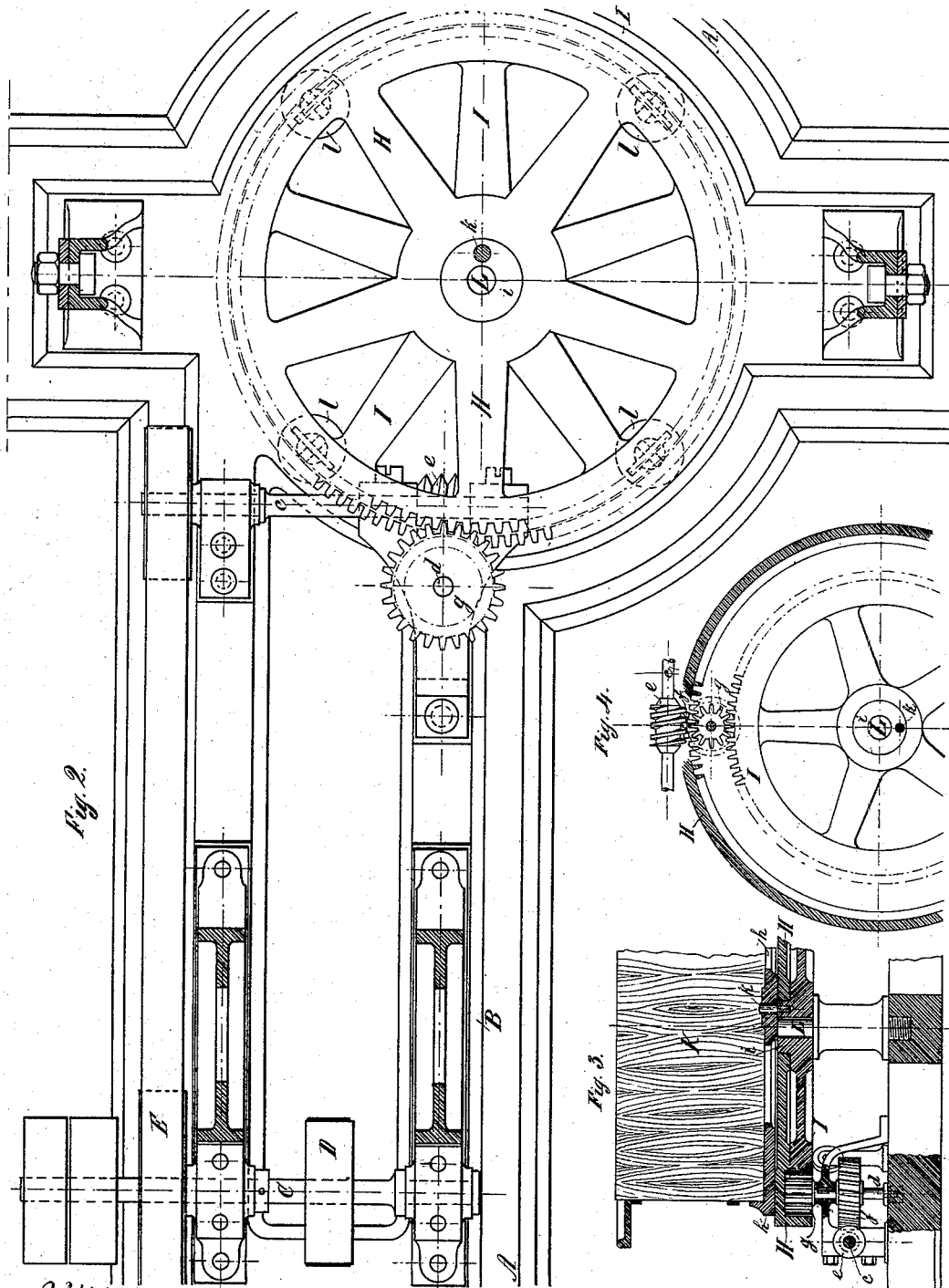
(No Model.)

2 Sheets—Sheet 2.

C. A. HAMMER, Sr.
MEAT MINCING APPARATUS.

No. 262,893.

Patented Aug. 15, 1882.



Witnesses:
Harry Orury
Harry Smith

Inventor:
Carl A. Hammer Sr.
by his Attorneys
Howell and Ford

UNITED STATES PATENT OFFICE.

CARL A. HAMMER, SR., OF BRUNSWICK, GERMANY, ASSIGNOR OF ONE-HALF TO HEINRICH PERSCHMANN, OF SAME PLACE.

MEAT-MINCING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 262,893, dated August 15, 1882.

Application filed April 24, 1882. (No model.) Patented in Germany March 4, 1881, No. 17,180, and in England October 25, 1881, No. 4,666.

To all whom it may concern:

Be it known that I, CARL ANDREAS HAMMER, Sr., a subject of the Duke of Brunswick, and a resident of Brunswick, Germany, have invented certain Improvements in Apparatus for Mincing Meat and other Substances, (for which I have obtained German Letters Patent No. 17,180, March 4, 1881, and British Letters Patent No. 4,666, October 25, 1881,) of which the following is a specification.

These improvements relate to a peculiar arrangement destined for imparting a concentric and at the same time an eccentric revolving motion to the chopping-block of the apparatus.

The annexed drawings represent an apparatus embodying these improvements.

Figure 1 is a partial vertical section and side elevation, and Fig. 2 a top view, of the apparatus, the chopping-block being taken off in order to allow an easier explanation of the arrangement.

The whole apparatus is mounted on a frame, B, placed upon the foundation A. It is intended to be driven by machinery, the moving-power being transmitted to the main shaft C by means of a belt. On this shaft there are placed two pulleys. The one, D, is destined to convey motion to the shaft C', which imparts a rocking motion to the chopping-knife G by means of the crank *a* and connecting-rod *b*, and the other pulley, E, transmits motion to the lower shaft, *c*. The vertical spindle *d* receives its motion from the latter by means of the worm *e* and worm-wheel *f*, and carries at its upper end two pinions of different diameters, *g* and *g'*. The larger one of them gears with the upper wheel, H, and the smaller one with the lower wheel, I, which is a little larger than the upper wheel, H, which turns loosely upon the nave *i* of the latter. From this it results that at every revolution of the spindle *d* the wheel H turns a little faster than the wheel I. The chopping-block K is provided at its bottom with a circular metallic plate, *h*, embracing the lower edge of the block, which plate rests directly upon the wheel H. The nave *i* of the wheel

I penetrates the central hole of the wheel H and at its upper face carries a pin, *k*, placed 50 eccentrically in relation to the common revolving axis L of the wheels H and I. The weight of the latter and the block K, together with the chopping-knife G, rests upon the four supports *l*, provided with rollers on which the 55 whole arrangement rolls.

If, now, the apparatus be put into action, the wheels H and I will turn forwardly at the rate of the different number of teeth of the wheels, Fig. 1, in gear. The upper wheel, H, 60 revolving round the nave *i*, takes along with it by friction the chopping-block K, which turns round the pin *k*. As the wheel I is put into rotation, at the same time the pin *k* or the center of revolution of the block performs 65 a circular motion, causing thus the block to slide partially upon the wheel H, in the same time turning round the pin *k*. Thus it results that during one complete revolution of the wheel I the block will at successive moments 70 assume always another eccentric position in relation to the center, L, of revolution of the wheels H and I.

Figs. 3 and 4 show a modification of the above-described arrangement. In this case 75 the upper wheel, H, on which the block K rests, is provided with internal teeth, and is larger than the lower wheel, I, the latter being externally toothed. Both these wheels are moved by one pinion, *g*, placed between 80 the internal and external teeth of the wheels, the spindle *d* receiving its motion in the same way as above described. It will be understood that in this case the wheels H and I do not revolve in the same direction as in 85 the arrangement shown by Figs. 1 and 2; but the one moves in opposite direction to the other.

I claim as my invention—

1. A meat-mincing apparatus having a chopping-block and devices, substantially as described, for imparting a planetary motion to said chopping-block.

2. The combination of the chopping-block of a mincing-machine with wheels H and I, 95 one carrying an eccentric pivot for and the

other in frictional contact with said block, and devices for rotating said wheels at different speeds, substantially as set forth.

3. The combination of the cutting-block of
5 a meat-mincing machine with a wheel, I, having an eccentric pivot-pin for the cutting-block, a plate, H, mounted and adapted to turn on the nave of the wheel I and in frictional contact with the cutting-block, and gearing for

turning said wheels at different speeds, all substantially as described.

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

CARL ANDREAS HAMMER, SENIOR.

Witnesses:

WILLIAMS C. FOX,
JOHN. KRACKE.