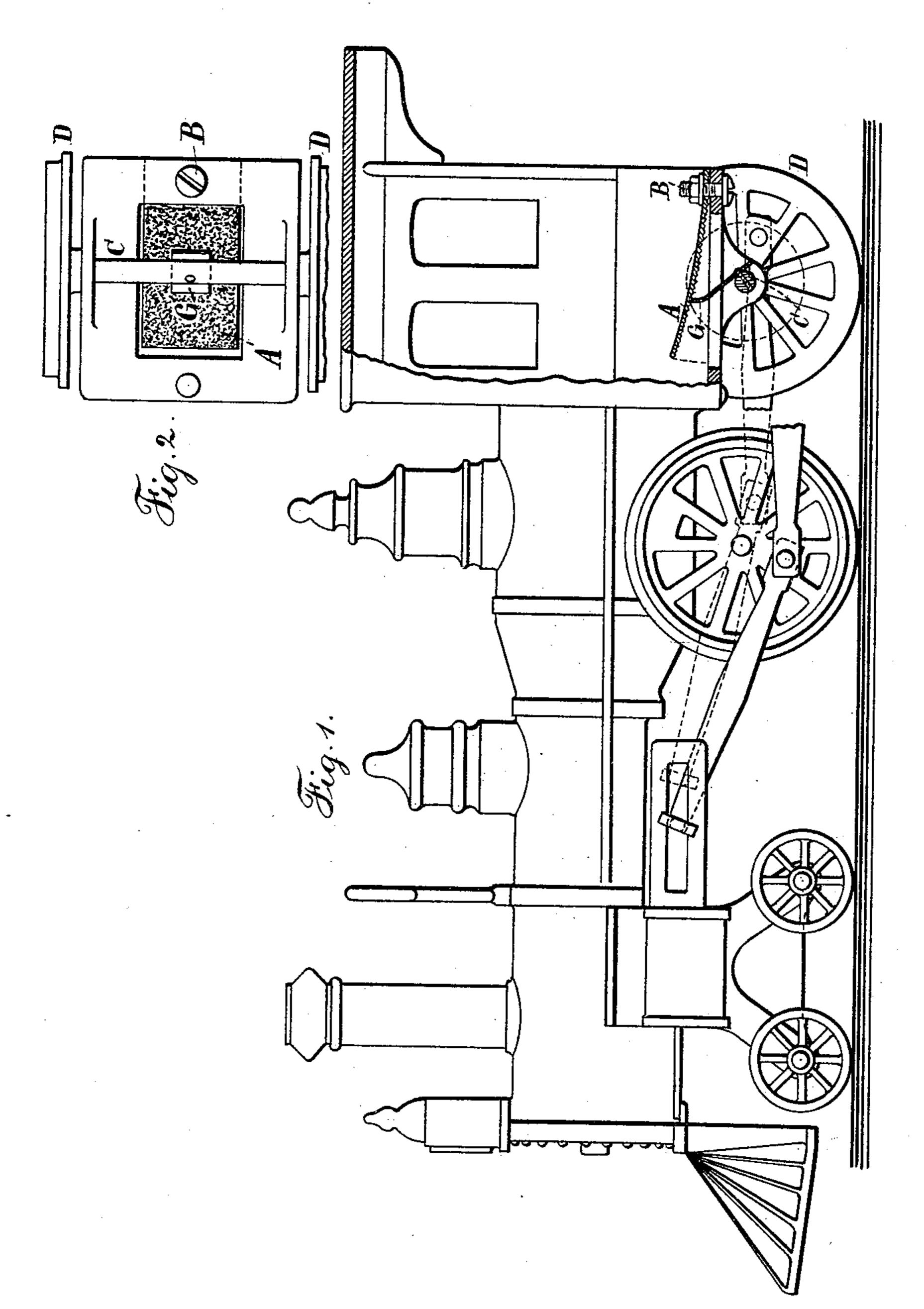
F. W. CARPENTER.

TOY.

No. 389,364.

Patented Sept. 11, 1888.



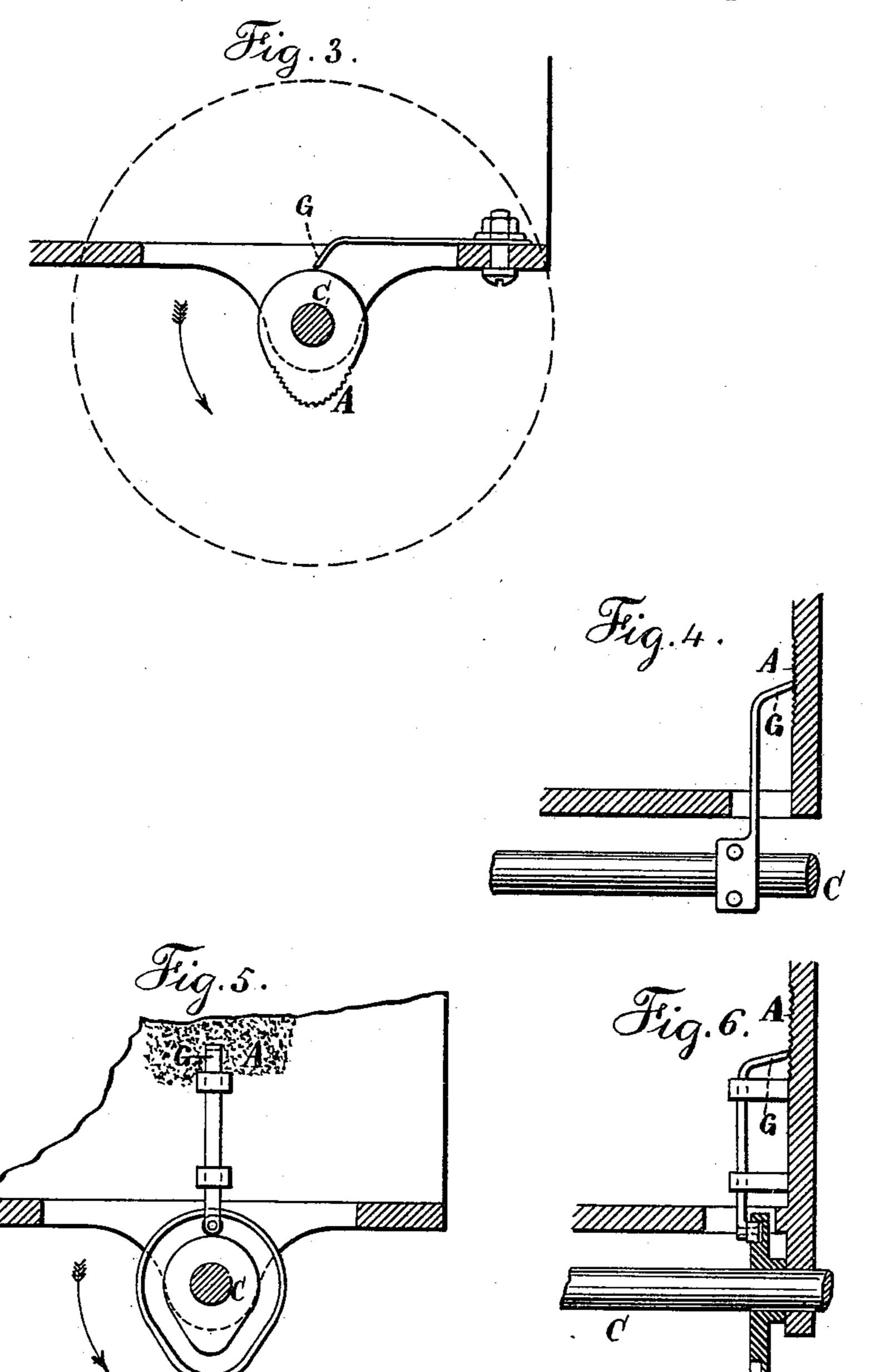
Witnesses: Haib-Chart Smith. Inventor: Francis W. Carpenter, per Lemmel W. Perrell any

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Witnesses: J. Stail, Chrs H.Shurk,

Inventor: Francis W. Carpenter, Jus Lenwel H. Ferrell atty.

INITED STATES PATENT OFFICE.

FRANCIS W. CARPENTER, OF HARRISON, NEW YORK.

TOY.

SPECIFICATION forming part of Letters Patent No. 389,364, dated September 11, 1888.

Application filed February 27, 1888. Serial No. 265,391. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS W. CARPENTER, of Harrison, in the county of Westchester and State of New York, have invented an Im-5 provement in Toys, of which the following is

a specification.

Toy locomotives have heretofore been constructed with a cylinder and plunger, the plunger being connected to a crank or crankro pin, so as to be moved when the locomotive is drawn along the floor and produce a puffing or whistling action in imitation of steam passing off in a locomotive. This device is expensive to construct, liable to get out of or-15 der, and difficult to repair.

My invention is made for imitating the puff of the steam in a toy locomotive or toy fire or other engine by a cheap and efficient device applied to the ordinary toy locomotive, 20 so that by drawing such toy along a noise will be made resembling the puff of the ex-

haust-steam.

In the drawings, Figure 1 is an elevation of the toy locomotive, partially in section. Fig. 25 2 is an inverted plan representing the axle and the device for making a noise in imitation of the puffing of steam; and Figs. 3, 4, and 5 are modifications of the said device.

I find that by drawing across the surface of 30 a piece of sand-paper an arm or finger preferably in the form of a piece of sheet metal there is a noise made that resembles the puffing of a locomotive or the escape of steam, and in applying my invention to toy loco-35 motives the piece of sand-paper A or other roughened surface—such, for instance, as a piece of sheet metal with fine projections or perforations in the same—is to be fastened upon the toy in such a way that a rubbing 40 article is brought periodically into contact with such roughened surface. I prefer to make use of this sand-paper or roughened surface A within the base of the locomotive or engine and to attach the same at one end 45 by a clamp or screw, B, so that the other | constructed to bear upon such roughened sur- 100 portion of the sand-paper is loose and free to rise and fall, and I place upon the axle C of the drivers D an arm or small plate, G, of sheet metal, so that as the axle is revolved 50 by drawing the toy along upon the floor the end of this arm presses against the roughened surface and lifts the same and also draws across this roughened surface, producing a vibration or sound corresponding very closely 55 to the puff of steam in an actual lomotive.

I do not limit myself to any particular position in which to place the piece of sandpaper or other roughened body, nor to the shape or character of the moving device that rubs across such roughened surface, because 60 the moving device may describe the arc of a circle parallel with the plane of the said sand-paper instead of at right angles to it, and the moving article may be reciprocated, if desired.

The movement is usually derived from the wheels of the toy as the same is drawn along or propelled, and the sand-paper or roughened surface is introduced at whatever part of the toy is most convenient and suitably se- 70 cured or supported in its place, so as to produce the desired sound.

I claim as my invention—

1. The combination, with a toy having wheels, of a device having a roughened sur- 75 face, such as sand paper, and an arm or equivalent moving body actuated by the toy as it is moved along, the same being adapted to produce sonorous vibrations by the contact of the parts, substantially as set forth.

2. The combination, with a toy having wheels, of an arm connected to one of the revolving shafts upon such toy, and a piece of sand-paper or similar roughened material attached at one end to the toy and free at the 85 other end, and with the surface of which sandpaper the revolving arm comes into contact, substantially as set forth.

3. The combination, in a toy having revolving shafts, of a piece of sand-paper or 90 other roughened material, a fastening device for connecting it to the toy, and a finger or projecting piece of metal fastened to one of the revolving shafts of such toy and constructed to bear on such roughened material, substan- 95

tially as set forth.

4. The combination, in a toy having wheels, of a device having a roughened surface, such as sand-paper, and an arm or piece of metal face periodically by the movement of the toy to produce a sound similar to escaping steam, substantially as specified.

Signed by me this 24th day of February, 1888.

FRANCIS W. CARPENTER.

Witnesses:

GEO. T. PINCKNEY, WILLIAM G. MOTT.