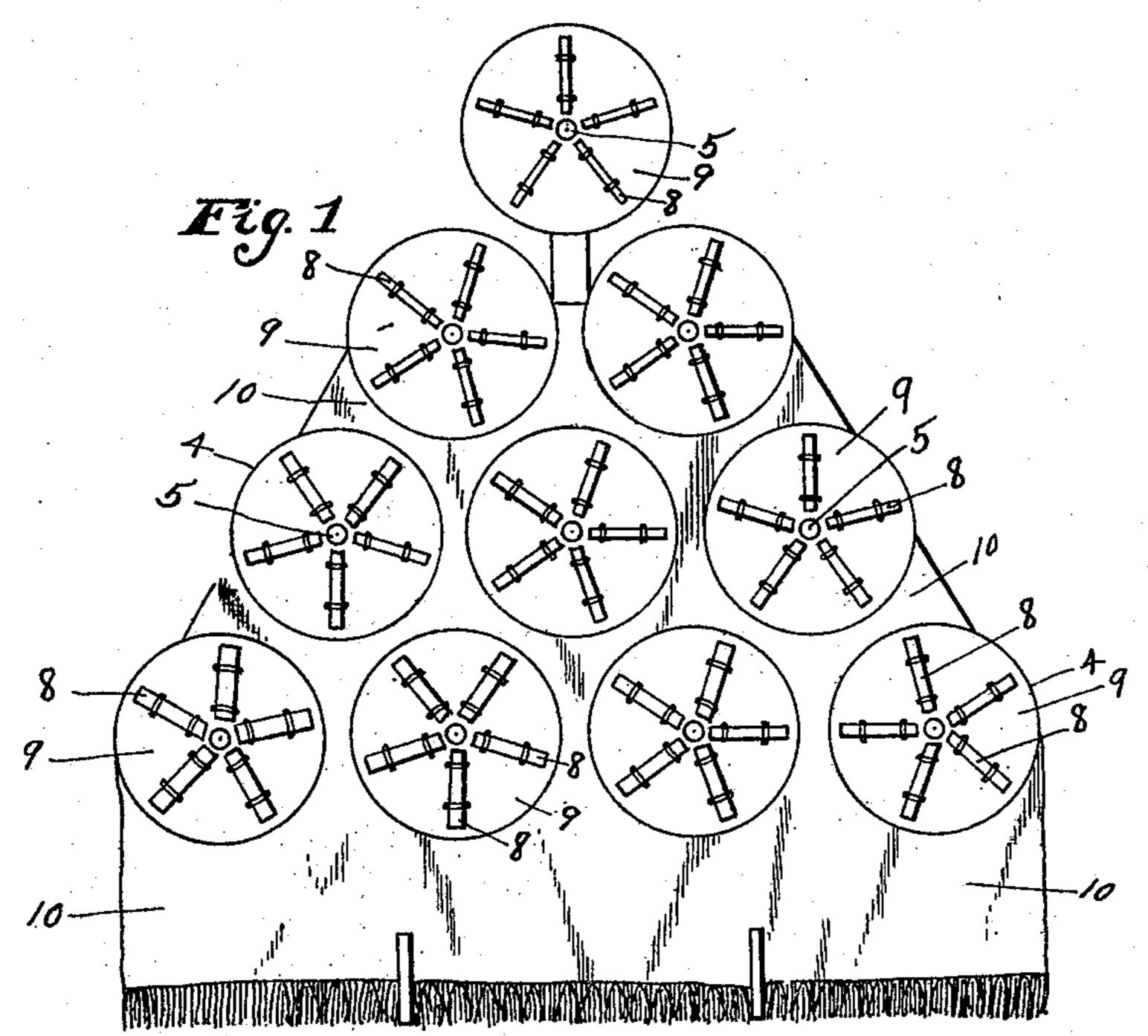
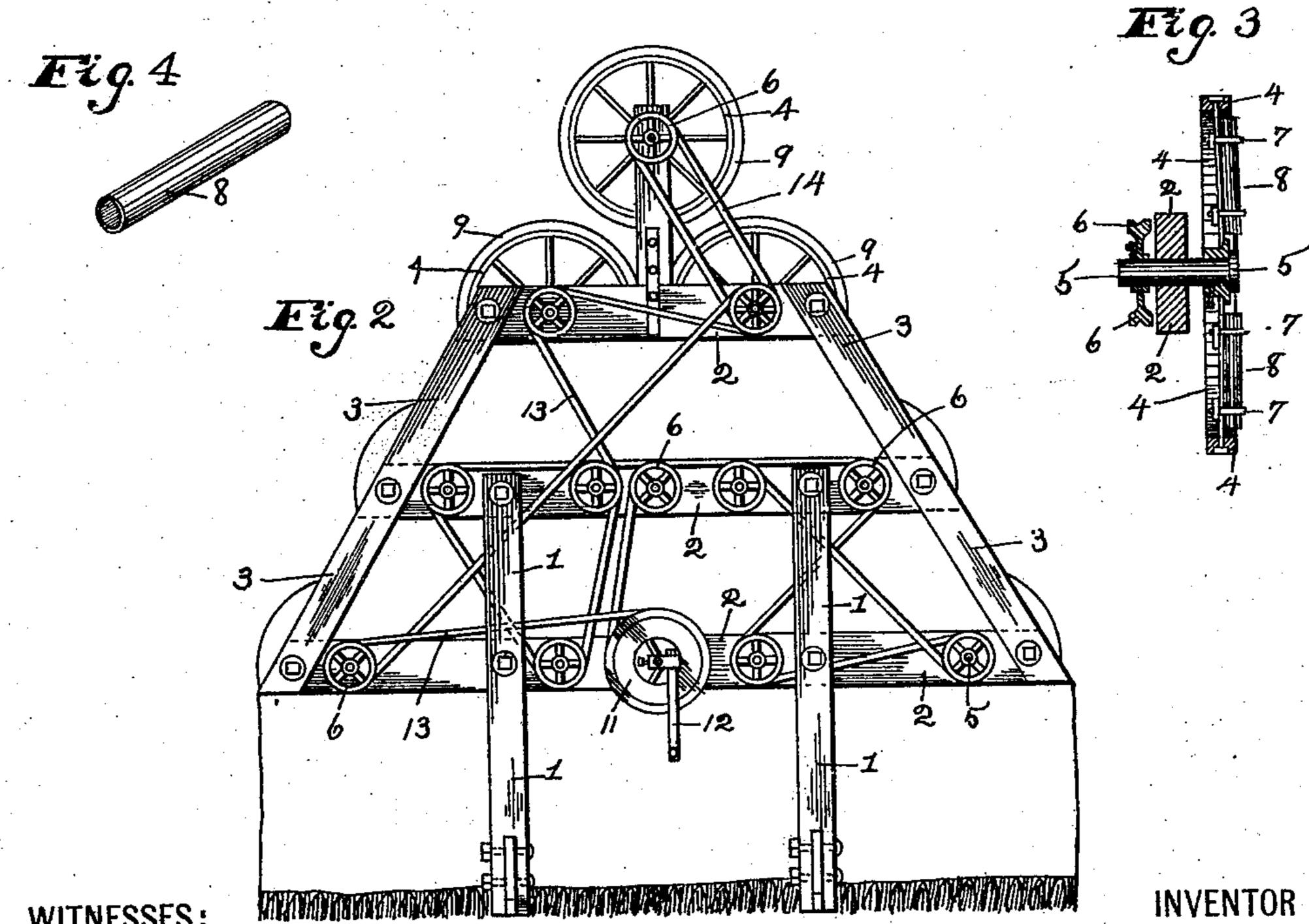
E. R. KLEEMICHEN.

MUSIC PRODUCING APPARATUS.

(Application filed Aug. 2, 1900.)

(No Model.)





WITNESSES:

. Edward Richard Kleemichen

United States Patent Office.

EDWARD RICHARD KLEEMICHEN, OF NEW YORK, N. Y.

MUSIC-PRODUCING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 688,866, dated December 17, 1901.

Application filed August 2, 1900. Serial No. 25,628. (No model.)

To all whom it may concern:

Be it known that I, EDWARD RICHARD KLEEMICHEN, a citizen of the United States, residing at New York, in the borough of Man-5 hattan and State of New York, have invented a certain new and useful Improvement in Music-Producing Apparatus, of which the following is a specification.

My invention relates to musical instruro ments; and the objects of my invention are to provide an improved music-producing mechanism of simple, attractive, and unique construction and to produce certain improvements in details of construction and operation, 15 which will be more fully pointed out hereinafter. These objects I accomplish in the manner illustrated in the accompanying drawings, in which—

Figure 1 is a face view of my improved mu-20 sical instrument. Fig. 2 is a rear elevation thereof. Fig. 3 is an enlarged central vertical section through the outer and inner wheels of one of the shafts, and Fig. 4 is a perspective view of one of the musical tubes which I 25 employ in the manner hereinafter described.

Similar numerals refer to similar parts

throughout the several views.

In carrying out my invention I employ supporting frame-standards 1, to the upper por-30 tions of which are secured the transverse parallel bars 2 of a substantially pyramid-shaped framework 3. On the front or forward face of this framework 3 are arranged pyramidally a desirable number of wheels 4, there being 35 in the present case ten of these wheels shown, although it is obvious that the number may be changed, if desired. The wheels 4 are mounted on the outer ends of short rearwardly-extending shafts 5, which are jour-10 naled in and pass through the frame-bars 2. On the rear end of each of the shafts 5 and on the rear side of the framework 3 is carried a pulley or belt-wheel 6. On the front face of each of the wheels 4 I secure radially, through 45 the medium of suitable clips 7, a desirable number of tubes 8, these tubes being preferably formed of suitable metal, although it is obvious that any desired material may be employed in their construction. The tubes 50 of the different wheels are graduated in circumference for the purpose of imparting dif-

ferent tones when struck in the manner here-

inafter described. The faces of the wheels 4, beneath the tubes 8, may, as indicated in Fig. 1 of the drawings, be suitably covered by 55 cover-disks 9, and these covers may be suitably ornamented or fancifully shaped, if desired. The framework 3 may also be covered on its forward side by suitable material, such as is indicated at 10, this cover material hiding 60 the framework from view from the front of the instrument.

Journaled in the central portion of the lower frame-bar 2 and on the rear side thereof is a comparatively large power or pulley wheel 11, 65 which may be provided with an eccentricallyarranged hand operating-crank 12 or which may be suitably belted or otherwise connected with a source of mechanical power, such as a motor or engine. Passing about the 70 main wheel 11 is an endless power-contributing belt or cord 13, which, running from said wheel 11, also passes over or engages the various wheels 6, with the exception of that wheel 6 which is employed at the apex of the 75 pyramid, this latter wheel being connected with a lower wheel 6 through the medium of a short endless belt or power-cord 14. It will be observed that the manner of running the belts 13 and 14 over or about the various 80 wheels 6 from the main operating-wheel 11 is such as to impart when said operating-wheel is rotated and when practical to do so rotary motion to adjoining wheels 4 in opposite directions:

Through the belt connections with the pulley-wheels 6 it will be seen that comparative rapid rotary motion may be imparted to each of the shafts 5 and tube-carrying wheels 4. Owing to the fact that the tubes of the dif- 90 ferent wheels are, as hereinbefore stated, of different tones, it is obvious that a player when sufficiently familiar with the tones of the tubes of the various wheels may by successively inserting the head of a playing-stick 95 in the paths of the tubes of different wheels produce the sounds or notes of a musical composition.

It is obvious that suitable and well-known means may be provided for connecting elec- 100 tric-lighting wires with incandescent lamps arranged on the wheels 4 and upon the forward side of the framework 3 or its cover and that the various parts of my device which are exposed to view from the front may be ornamented to impart an attractive appearance.

Having now fully described my invention, what I claim, and desire to secure by Letters Patent, is—

In a music-producing apparatus, the combination with a framework comprising two standards, two transverse parallel bars secured respectively intermediate of the standards' length and at their ends, the one secured at the ends being the shorter, two inwardly-inclined pieces connected to the outer ends of said bars and extending above, a short bar connected to the upper ends of said inclined pieces parallel with the other bars, and a short post supported by and extending above

said uppermost bar, of a series of shafts journaled at stated intervals in said parallel bars and short post, power-wheels carried upon the rear ends of said shafts, flat disks or wheels 20 carried upon the forward ends of said shafts, tubes secured upon the outer faces of said disks in a radial manner, a large power-wheel journaled in the lower parallel bar, and a motion-imparting connection connecting the 25 power-wheels so that all may be revolved in unison.

EDWARD RICHARD KLEEMICHEN.

In presence of— C. C. Shepherd, A. L. Phelps.