G. W. JACKSON.

ARRANGEMENT OF SUBWAY TERMINAL LOOPS.

APPLICATION FILED SEPT. 1, 1908.

916,160.

Patented Mar. 23, 1909.

2 SHEETS—SHEET 1.

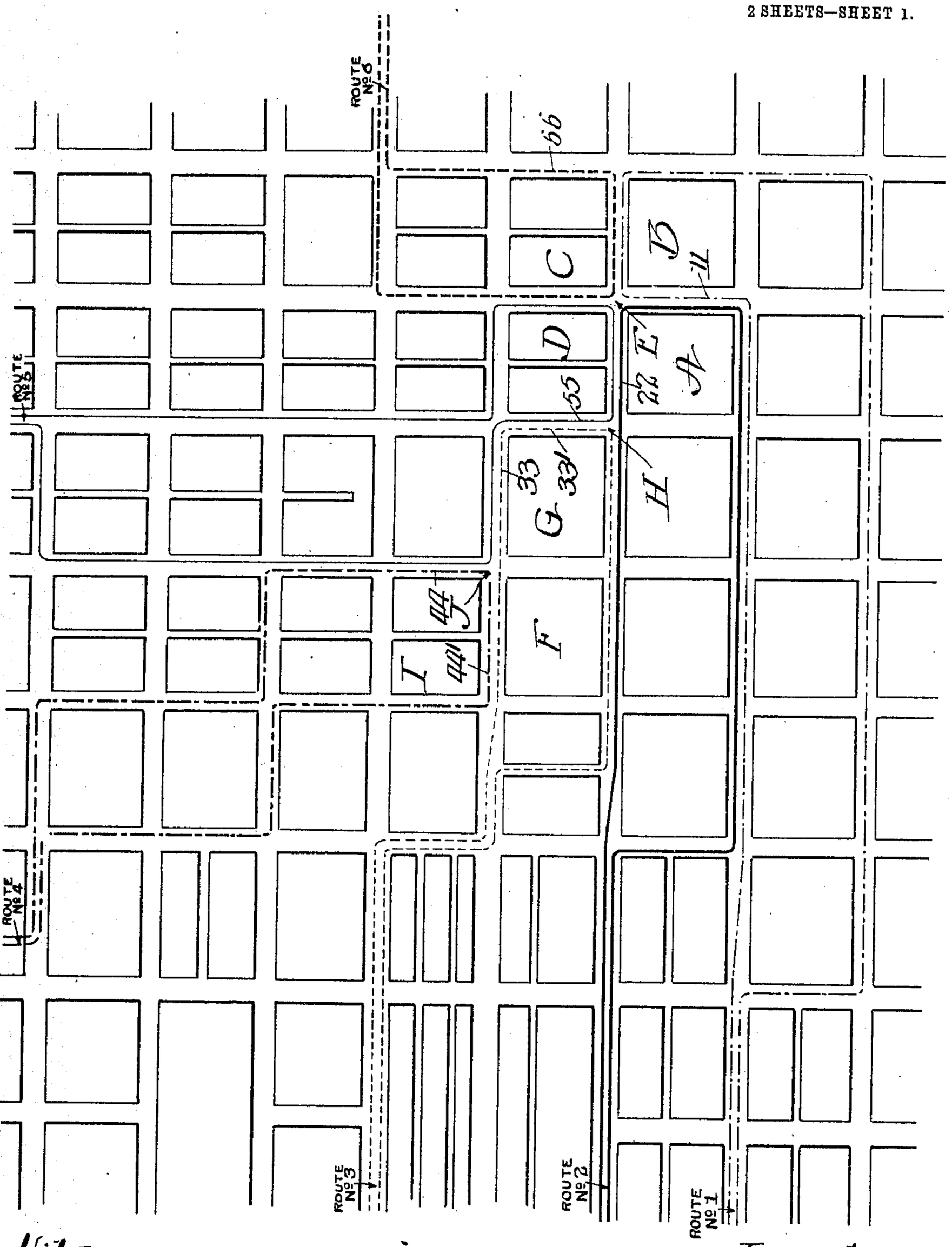

Fig. 1.

Witnesses:
F. H. Alfred
M. V. Hall

Inventor:
George W. Jackson
by Poole & Brown
Attys

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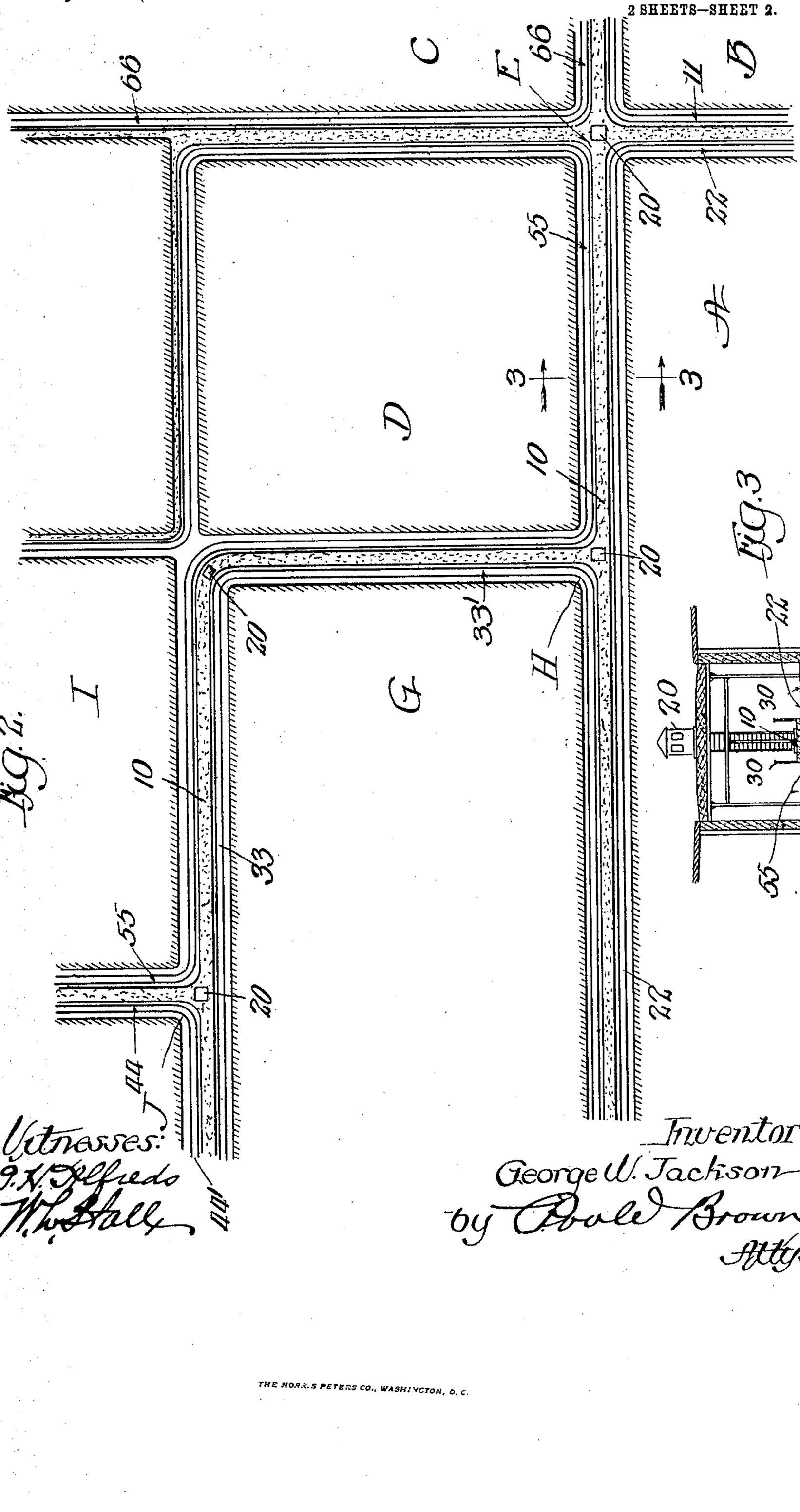

FIG. 2.

FIG. 3.

Witnesses:
J. N. Delfredo
W. Hall

Inventor
George W. Jackson
by Dodd Brown
Attys

UNITED STATES PATENT OFFICE.

GEORGE W. JACKSON, OF CHICAGO, ILLINOIS.

ARRANGEMENT OF SUBWAY TERMINAL LOOPS.

No. 916,160. Specification of Letters Patent. Patented March 23, 1909.

Application filed September 1, 1908. Serial No. 451,235.

To all whom it may concern:

Be it known that I, GEORGE W. JACKSON, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Arrangement of Subway Terminal Loops; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the characters of reference marked thereon, which form a part of this specification.

This invention relates to a system or arrangement of terminal loops of railways operating in subways built beneath the streets of cities for traction purposes, and the object of the invention is to bring the terminal loops of a number of subway lines or tracks beneath a "downtown" or transfer district of the city in such close adjacency as to greatly facilitate the transfer of passengers from one line or route to others extending into the transfer district, while avoiding the necessity of passengers crossing the tracks in making such transfers and avoiding the tracks crossing each other in such district.

The invention consists in the matters hereinafter set forth and more particularly pointed out in the appended claims.

As shown in the drawings:—Figure 1 is a diagrammatic plan of a typical lay-out of the streets of a city, showing in differentiated lines the several downtown terminal loops of a number of subway routes or railway tracks. Fig. 2 is an enlarged view of the intersecting subways containing the adjacent parts of the track or route loops, and illustrating walks extending between the double tracks in the subways over which passengers may pass from one transfer station to another. Fig. 3 is a cross-sectional view of a double-track subway, taken on line 3—3 of Fig. 2.

As shown in Fig. 1, I have indicated by full and dotted lines, six subway routes or tracks which converge from the surrounding parts of the city to the central transfer district. They are designated as routes No. 1, No. 2, No. 3, No. 4, No. 5 and No. 6. The terminal loops 11, 22, 33, 44, 55 and 66 of said routes are brought together in the transfer district in such manner that one side or member of each loop lies parallel and together with a portion of another loop in a double track subway, whereby ready transfer may be made from the loop of one route to another. All of said loops are so arranged that each loop is in convenient walking distance of every other loop, and walks are provided between the tracks in the subways over which each transfer station may be reached from any other transfer station without crossing the tracks.

The loops 11, 22, 55 and 66 of routes Nos. 1, 2, 5 and 6 extend about four adjacent blocks A, B, C and D whose adjacent corners are at two intersecting streets. The corners of the said four loops are brought together in the two intersecting subways at the point E beneath said intersecting streets, and the sections of the subways between adjacent blocks A, B, C and D containing parts of two tracks of different loops. The loop 33 of route No. 3 extends about blocks designated as F and G, and the closed end portion 33^1 of the loop is located in the same section of the subway as that portion of loop 55 which is on that side of the block D remote from the central point E. One side of the loop 33 extends for a distance parallel with and in the same section of the subway as the adjacent side of the loop 22. The corner H of said loop 33 is, therefore, located but a block from the central transfer point E. The loop 44 of route No. 4 is located with its closed end portion 44^1 lying in the same subway section with a portion of one of the longer sides of the loop 33 and partially surrounds the block I alongside of the block F. The corner J of said loop 44 nearest the central transfer point E is but three blocks from said transfer point. It will be thus noted that with this arrangement the four loops 11, 22, 55 and 66 are brought with their corners beneath two intersecting streets at the point E so as to afford the most convenient means possible of transferring from one line to another thus centering at said point, while the loops 33 and 44 of routes No. 3 and No. 4 are located but one and three blocks, respectively, from the central transfer point E.

Arranged within each of the subways which contains a portion of two loops, and between the tracks of such parts of the loops, are walks 10. These walks may extend continuously throughout the length of the several looped portions of the subway as far as may be desired to permit passengers to walk through the subway from different stations to others before ascending to the street grade in order to avoid crowded overhead streets. The principal use of the walks, however, as associated with the present arrangement of.

the loops is to provide free and uninterrupted passage between the transfer stations 20 of the several loops, while avoiding the necessity of transferring passengers crossing the tracks. It will be understood that the lower landings of the stairways from the street level to the subway level will be located between the tracks, and such landings may be located at street intersections or other points as local conditions may permit or require. Thus a person leaving a car from a station of either of the routes, in the transfer district, is able to pass to a station on any other loop within said district without crossing a track.

With the arrangement herein shown, it will be noted that passengers transferring from the loop farthest distant from the central transfer point E, to wit, from the loop 44, are required to walk only three blocks to reach the transfer station of any of the loops. Moreover, a passenger may transfer from distant loops 33 and 44 to any of the loops which center at the transfer point E over a single line by walking only the distance between the station of the loop which he leaves and the nearest station of the adjacent loop. It will be understood that the loops may also be reached from the streets by stairways which extend to the subway level outside of the tracks, in which event the cars will be arranged to be boarded from both sides. The walks 10 are separated from the tracks by guard rails or fences 30 as shown in Fig. 3.

I claim as my invention:—

1. In a subway system, the arrangement of the terminal loops of the routes or tracks in the transfer district of the system, characterized by arranging the loops of the several routes or tracks in subway loops beneath streets at the sides of closely adjacent blocks and arranging route loops with the corners thereof at a central transfer point beneath the intersection of streets separating said blocks, there being a free and unobstructed passage in the subway between transfer stations of adjacent loops.

2. In a subway system the arrangement of the terminal route loops in the transfer district of the system, characterized by arranging the loops of the several routes in subway loops beneath streets at the sides of adjacent blocks, and arranging certain of the route loops with the corners thereof at a central transfer point beneath the intersection of streets separating said blocks, and arranging certain of said loops along side of each other, parts of each loop of the subway being traversed by parts of loops of different routes, arranged therein side by side, there being free passage way between the transfer stations of the loops at said central transfer point, and free and unobstructed passage ways from said central transfer point to transfer stations belonging to other distinct route loops.

3. In a subway traction system, the arrangement of the terminal loops of the routes or car tracks in the transfer district of the system, characterized by arranging the loops of the several routes or tracks in subway loops beneath the streets at the sides of closely adjacent blocks, parts of each loop of the subway being traversed by parts of loops of different routes or tracks, transfer stations in the subway loops between the tracks belonging to different route loops and walks between the tracks in the subway extending uninterruptedly from one transfer station to the other without crossing the tracks.

4. In a subway system, the arrangement of the terminal loops of the routes in the transfer district of the system, characterized by arranging the loops of the several routes or tracks in subway loops beneath streets at the sides of closely adjacent blocks, the tracks of different routes lying side by side in a single section of the subway with no track crossing another, transfer stations located in the subway between tracks belonging to different route loops and walks extending uninterruptedly from transfer station to transfer station without crossing the tracks of the route loops.

In testimony, that I claim the foregoing as my invention I affix my signature in the presence of witnesses.

GEORGE W. JACKSON.

Witnesses:

FRANK W. STRATTON,
WALTER L. JOHNSON,
J. M. SINGLETON,
W. L. HALL.