

PRIVY COUNCIL

Corporation of Calcutta

Vs.

Chairman of the Cossipore and Chitpore Municipality
(Viscount Haldane, CJ, Lords Atkinson and Phillimore. JJ)

12.7.1921

JUDGMENT

Lord Atkinson J.

1. This is an appeal against the decree of the High Court of Judicature at Fort William in Bengal dated the 18th March, 1919.
2. The suit out of which this appeal has arisen was instituted in the Subordinate Court at Alipore by the present appellants against the present respondent. The question raised therein was whether the Cossipore and Chitpore Municipality had acted ultra vires in assessing the Corporation of Calcutta on an annual value of 25,000 in respect of a certain holding described in the plaint.
3. The Subordinate Judge answered this question in the affirmative and gave a decree for the plaintiffs, the Corporation of Calcutta. But his judgment was reversed by the final decree of the High Court above mentioned whereby the suit was dismissed with costs.
4. The present appeal has been preferred by the plaintiffs, the Corporation of Calcutta, from this decree.
5. The appellants supply Calcutta with water, and for this purpose own two holdings of land, one situate at 71, Barrackpore Road, Tallah, on which there is now and has for some time past been a reservoir and a pumping station. This piece of land has been assessed as a separate holding for the purposes of the Bengal Municipal Act, 1884 (Bengal Act, III of 1884), and the other, an adjoining holding No. 1, Khelat Babu's Lane situate about 308 to 400 feet distant from the pumping station and measuring about 16 bighas, 18 cottahs and 5 chittacks of land. It is with regard to the assessment of this latter piece of land (hereinafter referred to as No. 2 holding) that this litigation has arisen. Both pieces of land are within the municipal boundary of the defendant's

Municipality (the respondent). The principal waterworks of the appellants are situated at a place named Pulta, about 15 miles from Calcutta, and its principal pumping and distributing station is at Tallah; the pump and engine house are situated on the piece of land, called in this case holding or plot No. 1, at 71, *Barrackpore Road*. On this latter plot a very large underground reservoir has been constructed, from which the water is pumped into the mains at the rate of about 20,00,000 gallons per hour. These pumps work continuously, night and day. Plot or holding No. 2 is described in the appellants' plaint as measuring about 16 bighas, 18 cottahs and 5 chittacks, and having upon it an old stone masonry building measuring 30 by 20 feet, used as an out office, and an overhead steel tank resting on and supported by steel columns and girders. This tank is styled a balancing tank, and is capable of holding when full about 90,00,000 gallons. It is by pipes connected with the pumping-house.

6. Before its erection the appellants endeavored to send through their mains to Calcutta a constant supply of water, as far as possible at an equal pressure. In addition to the pumps and underground reservoirs at their main pumping station, they had a number of subsidiary pumps and reservoirs at different places in or near the town. These subsidiary pumps only worked during the day time. This system of distribution was adopted in order to cope if possible with the difficulty presented by the extreme want of uniformity in the rate at which water was used and consumed in Calcutta. During the hours of the morning from 6 o'clock to 10 o'clock, the consumption in Calcutta amounted to nearly 4 million gallons per hour, about twice as much as the principal pumps were capable of pumping into the mains; while during the afternoon and the evening so much less water was consumed in the town that the principal pumps, working as they did continuously, were able to supply what was sufficient. After the erection of the balancing tank the subsidiary pumps and reservoirs were no longer used, and the following method was adopted in substitution for them to furnish Calcutta with a constant and at all times an adequate supply of water. When the consumption in Calcutta exceeded what the pumps could pump into the mains, the balancing tank was tapped by opening with the hand a cock or valve on one of the pipes connecting the tank with the water mains. Through this pipe the water flowed into the mains. Not only did it mingle with and increase the volume of the water already in the mains, but, by reason of the elevation of the tank the force of gravity acting on the water the moment it passed from the tank into the pipes, caused it to rush as it were through the pipe and increase the velocity at which the whole volume of water in the mains flowed towards the town. When the demand in the town had decreased to less than the pumps could supply, a cock on another pipe connected with

the tank was by hand opened and the unneeded surplus water was pumped back into the tank, replenishing it so as to raise the level of the water in it to what it was before the discharge of the morning took place. Before the erection of this tank the holding No. 2 of the appellants was by the Commissioners of the municipality in exercise of their powers under the aforesaid Act of 1884, assessed at the annual value of Rs. 1,053.

7. After the erection of the tank with its supporting structure which cost the appellants about 20 lakhs of rupees they assessed this holding at the annual value of Rs. 1,27,030 on the basis of the cost of construction and demanded rates to the amount of Rs. 1,462-5-3. On an objection being made by the appellants this assessment was, in the month of August, 1914, revised and reduced to Rs. 30,000, that being the yearly rent at which according to the respondent assessors, it might reasonably be expected to be let as it stood to a hypothetical tenant. On a further revision in March, 1916, the assessment was on the same basis reduced to Rs. 22,000. It was not really disputed that the rise in the assessment from Rs. 1,053 to Rs. 30,000 was due to the fact that the value of the tank and its supporting structure was not excluded from consideration. The appellants contend that the tank and its supporting structure are, within the meaning of the third proviso of Sect. 101 of the Bengal Municipal Act of 1884, "machinery," and being so, that the respondent was bound by the provisions of that section to exclude them from consideration in making that assessment of plot No. 2, and that in taking them into consideration and thereby raising the assessment they acted ultra vires. Sect. 101 runs as follows:-

"The gross annual rent at which any holding may be reasonably expected to let shall be deemed to be the annual value thereof, and such value shall accordingly be determined by the Commissioners and entered in the valuation list.

"Provided that (except in the Darjeeling Municipality), if there be on a holding any building or buildings, the actual cost of erection of which can be ascertained or estimated, the annual value of such holding shall in no case be deemed to exceed an amount which would be equal to seven and a half per centum on such cost, in addition to a reasonable ground rent for the land comprised in the holding:

"Provided also that where the actual cost so ascertained shall exceed one lakh of rupees, the percentage on the annual value to be levied in respect of so much of the cost as is in excess of one lakh of rupees shall not exceed one-fourth of the

percentage determined by the Commissioners under Sect. 102.

"Provided further that in estimating the annual value of a holding under this section, the value of any machinery that may be on such holding shall not be taken into consideration."

8. It thus results, that the sole question for decision on this appeal is whether or not this balancing tank with its supporting structure is "machinery" within the meaning of the last proviso of this section. No definition of the term "machinery" is to be found in the Act. It is not an easy task to define its meaning. Perhaps the consideration of what are the precise functions which the tank and its supports respectively discharge may afford some assistance. The supporting structure merely serves to give the tank elevation so that the water which is allowed to escape from it may have a fall. The same function would be discharged by any hill-side into an excavation upon which a reservoir was constructed at an adequate height above the house or town which reservoir has to supply with water.

9. Then as to the tank itself, what functions does it discharge? It is a receptacle for water. It holds the water that is poured into it as long as that is desired. It is stationary. It does not move, nor do any of its parts move, the one upon the other. While water is in it the force of gravity acts upon the water; but the strength and rigidity of its sides counteract that force and prevent the escape or movement of the water. When this water is allowed to escape from it through a hole or holes in its side into pipes, the same force of gravity acts upon the water and pushes or draws it down the pipes, but this force of gravity acting on the imprisoned water is neither generated, modified, directed nor applied by the tank. The latter does not move anything automatically. If it be a machine and its parts be machinery, then it is difficult to see why every reservoir which holds the water that is poured into it and lets that water escape from it through an opening on its side or bottom when that opening is not blocked up is not equally a machine.

10. With a view of showing that the tank was a machine or machinery, it was urged on behalf of the appellants that the flow into the pipes of the water allowed to escape from it regulated the course of the water in the pipes and kept up a uniform pressure. But the nature and character of the functions which a reservoir performs cannot depend upon the work done by the water drawn off from it, or the use to which that water is put. These functions remain the same, whether the escaped water be allowed to flow over land and irrigate it, or be used to water roads, or to drive a dynamo for the purpose of lighting a house or houses with electric light.

11. Sect. 6 of the aforesaid Act, no doubt provides that holding means land held under one title or agreement and surrounded by one set of boundaries, and further provides that where two or more adjoining holdings form part or parcel of the site or premises of a dwelling-house, manufactory, warehouse or place of trade or business, such holdings shall be deemed to be one holding for the purposes of the Act, other than those mentioned in Clause A of its 85th section (i. e., the taxing of persons), and further provides that holdings separated by a road or other means of communication are to be deemed to be adjoining within the meaning of that section. Mr. Macmorran, as their Lordships understood him, having regard apparently to these provisions, contended on behalf of the appellants that in order to determine what was the true meaning of the word "machinery" as used in Sect. 101 of this Valuation Act, the works and erections on the two plots numbered 1 and 2 respectively, should be taken as a whole, and viewed as so many interdependent parts of one mechanical unit, but if that contention were sound, the underground reservoir, the roof and walls of the engine-house, if not indeed the old stone building used as an office, would all be covered by the word "machinery," quite as completely as would the tank and its supporting structure. The word "machinery" is often used in an entirely metaphorical sense, as in the phrase "the machinery of Government," but, in their Lordships' opinion, neither this engine-house nor this office could, according to the ordinary use of language, possibly be held to be "machinery" within the meaning of this statute, while on the other hand, if the tank and its supports be "machinery," it is difficult to see why the underground reservoir is not also "machinery." There is no essential difference between the two, except their situation, the one is buried underground, the other is raised high into the air. Skill, care and money are expended equally on the construction of both. Water is pumped or let flow into the underground reservoir (it does not appear which) from some external source, is stored there and pumped out of it into the mains. Into the tank water is pumped, stored there and allowed when occasion requires to flow out of it through an aperture in its side or bottom into the same mains. Their respective functions so closely resemble each other as to be in essence identical, yet it was not contended, nor even suggested, that the underground reservoir was "machinery."

12. The functions discharged by the tank closely resemble those discharged by the cisterns built on the roofs of those country houses which are situated far away from any system of waterworks. The rain water which falls upon the roof of the house is conducted by rain shoots or pipes into the cisterns, is stored there till needed and is through an aperture or apertures in its sides or bottom, drawn by the force of gravity

through pipes into the interior of the dwelling-house to satisfy domestic needs of different kinds. If the cistern rested on a tower built purposely to support it, the case would not be altered. Yet, in their Lordships' view, no intelligent person would, in the ordinary use of language, describe this whether supported on the roof of the dwelling house or on such a tower, together with the rain shoots and rain pipes, as "machinery," and still less would they describe the roof of the house, acting in this case the part of a catchment basin, as "machinery," nor even the water pipes in the interior of the house, nor all the four together. The money of the householder, the skill of the plumber, the carpenter, the mason, and possibly the slater, all have to be expended to fix in situ this system of water supply, just as the similar expense must have been incurred and skill exercised to erect the tank and its supports, but that consideration does not by itself make the one structure or the other "machinery." Nor in the case of the cistern would the fact, that the water was drawn into it by the action of a hydraulic ram erected 100 yards from the dwelling-house on the bank of a swiftly flowing river, alter the case.

13. Illustrations such as these may possibly be better guides to the true meaning of the word "machinery," when used in ordinary speech, than scientific definitions. For there is nothing in the language of this statute of 1884 or in the objects it was designed to effect, to suggest that its words are used in any special sense differing from their ordinary sense. A completed machine or a number of completed machines may of course, according to the ordinary use of language, be properly described as "machinery," so may those parts or members of a machine which when assembled, as it is styled, form a complete machine so also may some such of those parts, which when assembled with the other necessary parts, would form a complete machine be styled "machinery" but none of these conditions exists in the present case.

14. Much reliance was placed by the appellants' counsel in argument on a passage on the judgment of Lord Davey in the case of *Chamberlayne v. Collins*¹ but nowhere else. The question he was dealing with was whether within the meaning of a covenant in the lease with which he was dealing a switchback railway with its equipment was "operative machinery."

15. The first part of the passage runs thus:-

"There is always great danger in giving definitions, but I think I may say that 'machinery' implies the application of mechanical means to the attainment of some particular end by the help of natural forces, and the addition of the word "operative" means with the potentiality of operating or doing work. It is clear to

my mind that a switchback railway comes within that definition."

16. He then gives his reason for so thinking in the following words:-

"Because it is a thing skilfully built with curves of a particular shape, which by their peculiar form supply the motive power which actuates the carriages which run up and down the railway."

17. With all respect for Lord Davey, the words "supply motor power" do not appear to their Lordships to be very happily chosen. When a solid body is placed upon an inclined plane, two natural forces operate upon it; the force of friction and the force of gravity. If it moves down along this plane it is the resultant of those two forces which pull or push it down. The force which the inclined plane contributes is the force of friction. The force of gravity acts with equal strength, whether the slope of the plane be gentle or steep. The force of friction is in this instance a retarding not an accelerating force. If the incline of the plane be very gentle and its surface rough the force of friction will so effectually counteract the operation of the force of gravity that the solid body will remain at rest. If, on the other hand, the incline of the plane be steep and its surface smooth, the force of gravity will so overcome the force of friction that the resultant of the two will pull or push the body down the incline. of course, if the solid body be mounted on wheels running on rails the force of friction will be greatly diminished.

18. The curves of the switchback railway may by their shape favor the operation of the force of gravity, but they cannot increase or diminish that force. It is always constant. The only force the curves contribute to the action of the car is the retarding force of friction, which tends to prevent their movement. It is an error to say that the shape of the curves "supplies motive power." It may give and does give to the ever present force of gravity the opportunity of exerting itself more effectually. That is all.

19. If a man standing on the roof of a house and holding in his hand a stone, drops that stone into the street below, he does not in any way generate or supply the force which brings the stone to the ground with a velocity which increases as the square of the height of the man's hand above the street, and as momentum is weight multiplied by velocity, the stone strikes the ground with great force. But that force is, in no proper sense of the term generated or supplied by the man. While he held the stone in his hand he overcame the action of the force of gravity by the upward pressure of his hand. When he drops the stone he simply withdraws that upward pressure and allows the force of gravity to take full effect.

20. So in the present case it would, in the view of their Lordships, be an entire mistake to treat the force which hurries through mains the water that escapes from this tank, as a force generated or supplied or directed by the tank itself. The tank no more actuates the rush of the escaping or escaped water than does, in the above example, the hand of the man on the roof of the house, actuate the fall of the stone he held in it. The respective effects of the forces of gravity and friction on solid bodies resting on a sloping hillside were much discussed in the case of the *Rhondda Valley land-slip, Atty-General v. Cory Bros and Co.* ² It may well be, however, that in the case of a switchback railway, there is great art and ingenuity in constructing its curves in such a way that the momentum gathered by a car in descending one curve is sufficient to carry it up the next in front but not to carry it over the summit of the latter with a dangerous speed, but there is no art or ingenuity of that kind expended in so raising the height of the structure on which water takes stand so that the head pressure desired will be obtained no more than there would be in selecting the site of a reservoir to be constructed on a hill-side. The word "machinery" must mean something more than a collection of ordinary tools. It must mean something more than a solid structure built upon the ground, whose parts either do not move at all, or, if they do move, do not move the one with or upon the other in interdependent action with the object of producing a specific and definite result.

21. Their Lordships concur with Lord Davey in thinking that there is great danger in attempting to give a definition of the word "machinery" which will be applicable in all cases. It may be impossible to succeed in such an attempt. If their Lordships were obliged to run the hazard of the attempt they would be inclined to say that the word "machinery" when used in ordinary language *prima facie*, means some mechanical contrivances which by themselves or in combination with one or more other mechanical contrivances, by the combined movement and interdependent operation of their respective parts generate power, or evoke, modify, apply or direct natural forces with the object in each case of effecting so definite and specific a result. The tank and its supporting structure do not satisfy this definition.

22. But their Lordships think that however skillful definitions of "machinery" may be framed, the determination in any given case of what is or is not "machinery" must, to a large extent, depend upon the special facts of that case. In the present case their Lordships' view is that if this tank were fed by water, whether continuously, or as it is, intermittently, but from a natural source such as a mountain burn for example, no intelligent person would, in the ordinary use of language, describe it with its

supporting structure as "machinery." The fact that the water it receives does not flow into it from some such source, but is pumped into it, does not alter its character essentially, especially as the pumps which supply the water are situated at a distance of over 300 yards from it on a holding different from, though adjoining that on which it stands, that these pumps were constructed and worked in all essentials as they are now worked long before its erection was thought of, and that it is only the unneeded surplus of the water raised by these pumps in their ordinary operation from the underground reservoir that is diverted into it. They are, therefore of opinion that neither this tank nor its supporting structure, nor both combined, are machinery within the meaning of the 101st section of the above mentioned statute of 1884; that the respondent was justified in taking the value of these work into consideration as he has done in making the assessment of the appellants' No. 2 holding that the decree appealed from was right and should be affirmed, and this appeal dismissed, and they will humbly advise His Majesty accordingly. Some reliance was placed by the appellants upon the case of *Auckland City Corporation v. Auckland Gas Co., Limited*,³

37 New Zealand Law Report 1028. But that case is fundamentally distinguishable from the present one. What was then decided was that "the main pipes, gas meters and governors" of a gas company were, when taken all together, "machinery." The appellants must pay the respondent's costs.

Appeal dismissed.

Cases Referred.

1. (1894) 70 LT, 217

2. (1921) AC 521 : 85 JP 129 : 90 LJ Ch 221 : 37 TLR 313 : 19 LJR 145 : 125 LT 98