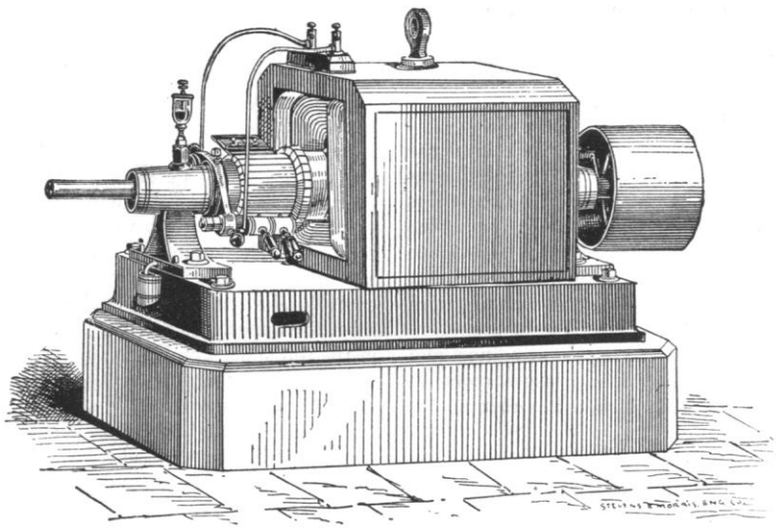
SCIENCE

FRIDAY, JANUARY 11, 1889.

THE CONTINENTAL DYNAMO.

MANY of the most important improvements that have been made in the last few years in dynamo-construction have been in the direction of greater simplicity and solidity of design, mechanically and electrically, and in the better proportioning of the different parts. No radical changes or discoveries have been made; but, if we compare the dynamo of to-day with that of four or five years ago, we will find a greater efficiency, a much greater output of current for the same weight of metal in the machine, and less expense for repair. But while no radical changes in principle have been made, yet some new types of dynamo have been introduced that present important peculiarities. The Continental dynamo, which we illustrate in this issue, seems to be as simple and compact as it is possible to make a dynamo. The pole-pieces and casing are one casting, so that there are no joints in the magnetic circuit. The magnetic coils are wound separately, and are slipped over the pole-pieces. The great advantages of this type of machine lie in low resistance of the magnetic circuit, and in the fact that practically all of the lines of force pass through the armature, together with its compactness and stability. The magnet coils and armature are protected from injury by the outer casing; and if it becomes necessary, they may be removed by simply taking off one bearing. There being very little leakage of lines of force, — only a few per cent compared with twenty to forty per cent for an ordinary dynamo, — there is no ill effect on watches brought in its neighborhood. The advantages of the dynamo seem to be in simplicity and solidity of construction, accessibility of different parts, no leakage of lines of force, and efficiency, while little care is necessary in attendance; and, as it is not high-priced, it is a machine that in general is likely to meet the demands of a wide circle of users.



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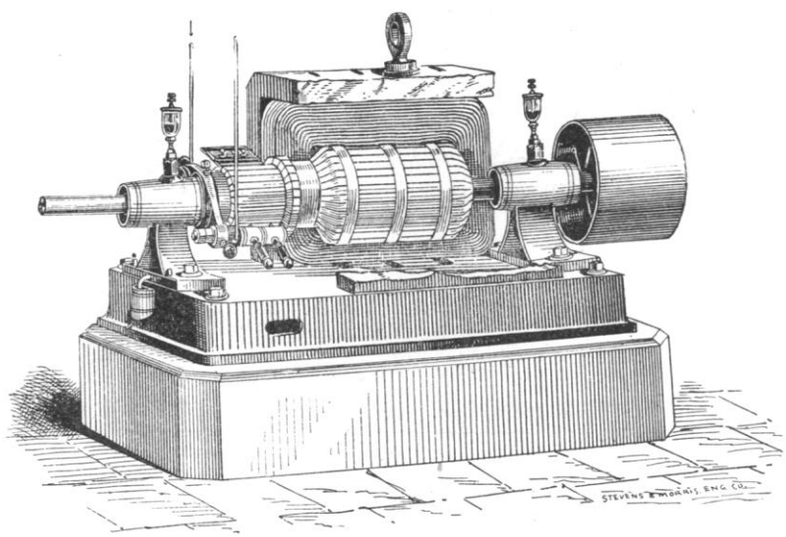

INTERIOR OF CONTINENTAL DYNAMO.