Suppose that a block operator of the form \((A_1 A_2^* 0)\), acting on the Banach space \(X_1 \times X_2\), generates a contraction \(C_0\)-semigroup. We show that the operator \(A_S\) defined by \(A_Sx = A_1 (S A_2 x)\) with the natural domain generates a contraction semigroup on \(X_1\). Here, \(S\) is a boundedly invertible operator for which \(-S^{-1} + \epsilon I\) is dissipative for sufficiently small \(\epsilon\). With the result the existence and uniqueness of solutions of the heat equation can be derived from the wave equation.