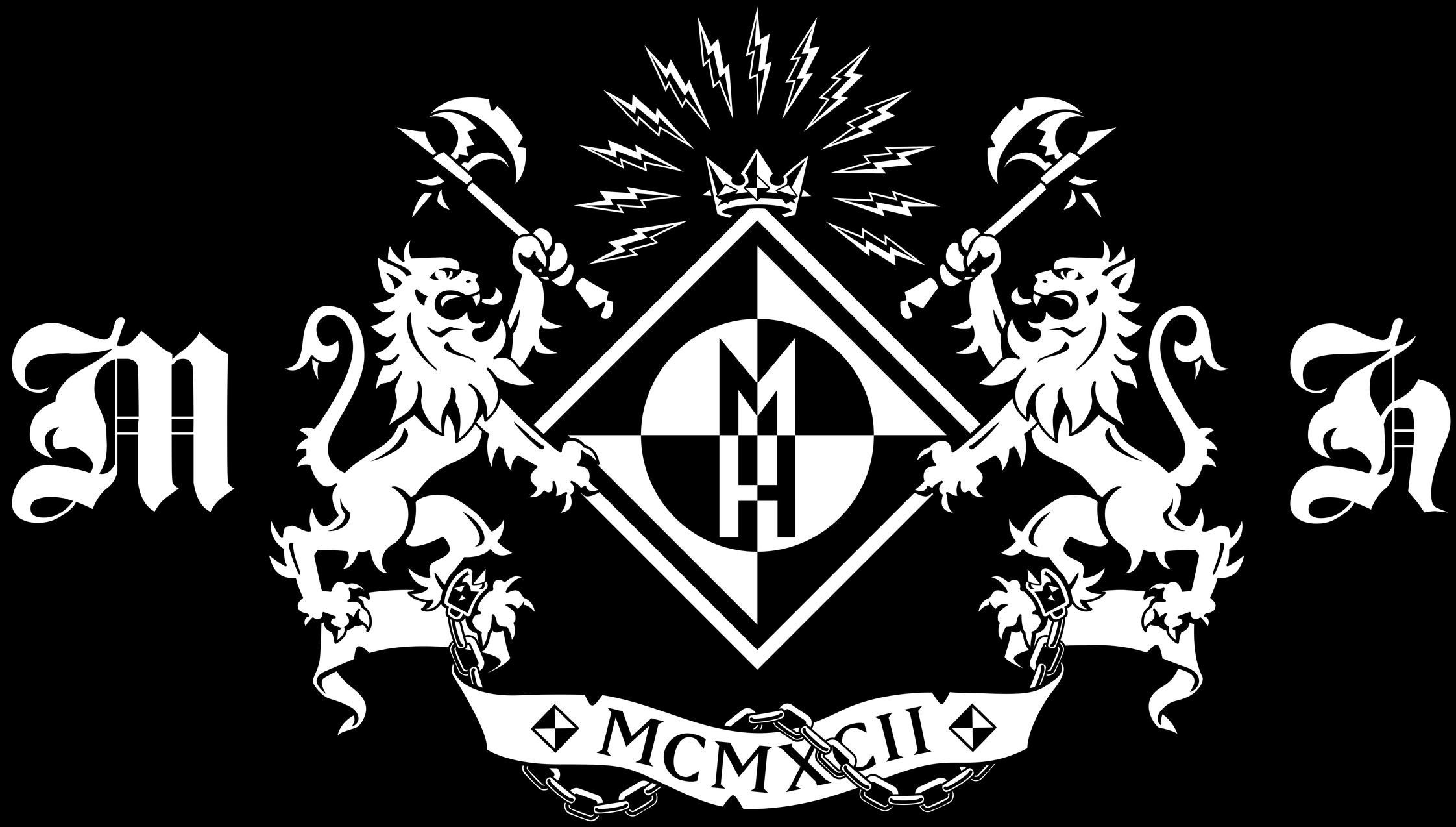MACHINE HEAD