BRIEF COMMUNICATIONS

SYNTHESIS OF 5, 7-DIMETHYLTHIENO-, 3, 1-DIMETHYLTHIONAPHTHENO-, AND 6, 4-DIMETHYLTHIENOTHIENOPYRIDINES

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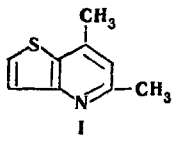
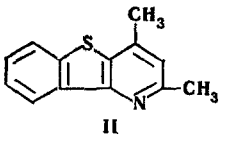
New heterocyclic compounds with a condensed thiophene ring are synthesized.

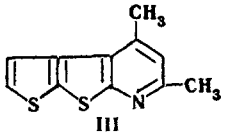
4-Methyl- and 7-methylthieno-, 1-methylthionaphtheno- and 4- and 8-methylthienothienopyridines [1–5] have been synthesized. The present communication describes syntheses of new heterocyclic bases: 5, 7-dimethylthieno[3, 2-b]-, 3, 1-dimethylthionaphthieno[3, 2-b]-, 6, 4-dimethylthieno[2, 3-b]thieno-[2, 3-b] pyridines, and 7, 9-dimethylthieno [3, 2-f]-quinoline (I–IV), respectively isosteric with 2, 4-dimethylquinoline, 2, 4-dimethyl-7, 8- and -5, 6-benzoquinolines.



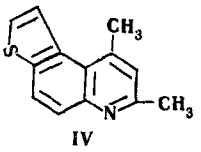
I



II



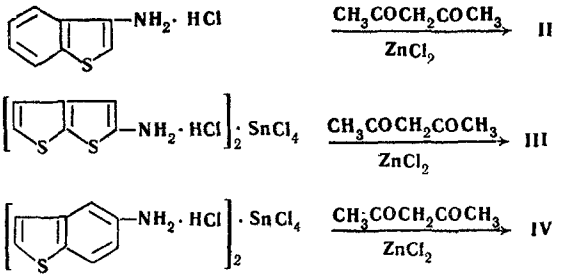
III



IV

4, 6-Dimethylthieno[2, 3-b] pyridine was synthesized in 1941 by Emerson and coworkers [6], by reacting the stannous double salt of 2-aminothiophene hydrochloride with acetylacetone, by heating in the presence of concentrated sulfuric acid. The isomeric 5, 7-dimethylthieno[3, 2-b]pyridine is obtained by condensing the stannous double salt of 3-aminothiophene hydrochloride with acetylacetone in dry ethanol, by heating with zinc chloride.

Compounds II–IV are obtained from the corresponding amino compounds according to the equations



All the compounds readily form picrates and methiodides.

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